1993 Information Services Expenditures for Use by IBM

										T					TT		_	_
MVIBM1.XLS								ation Ser										-
						Acti	ual User	Expendit	ures						1		1	-
Copyright 1994 by INPUT							v Vertic	al Industr	ν									
24-May-94	1					_	(S Mi	llions)							 		+	
1-may 3-	1						(4.3		T								-	_
						Final Adju	sted (for I	BM) Numb	ers for 199	3								
																	April 11	
	Discrete	Process	_			Retail	Whisale	Banking		Health		Business	Federal	State &	Misc	Total Ali	Prog Mgr	
PRODUCT/SERVICE SECTOR	Mfg	Mfg	Transp	Utilities	Telcom	Distr	Distr		Insurance	Services	Education		Gvmt	Loc Gymt	Industries	industries		Differenc
	(SM)	(SM)	(SM)	(SM)	(SM)_	(\$M)	(SM)	(\$M)	(SM)	(\$M)	(SM)	(SM)	(SM)	(\$M)	(\$M)	(\$M)	(SM)	(\$M)
SECTOR TOTAL	14687	7380	4214	1751	4037	2696	2813	14657	5249	5419	2050	5396	11366	6863	1301	89879		
Professional Services	5194	2569	269	362	1250	257	410	2588	1600	319	98	352	2600	2900	142	20910	20910	0
- IS Consulting	1342	644	67	119	277	66	90	688	403	78	26	96	517	744	35	5192		
- Education & Training	827	342	36	81	185	38	60					49	455	402	21	3163		
- Software Development	3025	1583	166	162	788	153	260	1525	965	196	57		1628	1754	86	12555		
Systems Integration	1631	447	225	634	293	409	211					235	3730	1015	9	10116	10650	534
- Equipment	957	172	78	206	78		67				41		1999	368	4	4614	-	1
- Software Products	116	44	14	58	20		15	39			10	31	270	64	1	762	1	-
- Professional Services	505	210	126	345	192		123			175	68	134	1296	556	4	4374		
- Other	53	21	7	25	3	11	6	29	5		2	12	165	27	0	366	3	1
Outsourcing	851	954	237	70	82	432	247	2963		1258	281	221	1483	1998	23	12527	12528	1
- Platform Operations	299	311	116	34	24	195	110					58	445	458	8	4045		
 Applications Operations 	338	419	76	19	38	133	78						712		10	5495		
- Desktop Services	115	120	25		10		34					26	178	225	3	1497		
- Network Management	99	104	20	8	10	44	25			142	7	26	148	260	2	1365		
- Applications Management		_	-					125								125		
Processing Services	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632		
- Transaction Processing	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632		
- Utility Processing																		
- Other Processing	-																	
Network Services	129	1110	427	32			411					691	1241	152		6847		-
- Electronic Information Svcs	62	941	309	29	116		79	792					323	56	150	4441		
- Network Applications	67	169	118	3	26	99	332	105	65	285	91	21	918	96	11	2406		
Applications Software	2706	815	478	260	485	341	661	2355	997	1237	828	1192	708	219	284	13566	-	-
- Mainframe	- 405	197	157	56	225	51	258						106	63		3527	1	
- Minicomputer	1284	267	124	76	120	150	151							44		4143		
- Workstation/PC	1017	351	197	128	140	140	252	582					425	112		5896		
Turnkey Systems	3282	696	310	114	590	800	548	1115	327	1071	262	975	1436	210	545	12281	-	-
- Equipment	1378	331	147	50	255	351	243						646	92		5298		
- Software Products	1297	252	118	44	230	305	205						546	80		4660	_	
- Professional Services	607	113	45	20		144	100						244	38		2323	_	



IBM1 XLS			156		of.	5/2	八		1993		on Servi r Use by		endiitures	3						12:18 PM 5/10/94
			3/		₩	¥	e			S SENT	ot				+	6				
/BM1XLS	-		al	60		al	1993	Informa	ition Ser	vices	رقا	OI	(1)	-	-6	70	F I	-		-
			. Kine	100		Kann		ual User			at to	1Vin	P		-0400	1				
pyright 1994 by INPUT		E	ישור			300	t	y Vertica		ry P	4	KAND		270	16011					
-May-94	\rightarrow		X			E		(\$ Mil	lions)	2		. 🗸		P	0		-	_		
			(X)			(*)				(8)		L(<u>5</u>)			(X)		+	-		
	-		_		wor	ksheet for	Aojusting	I neee NU	mbers to.	agree witt	April For	COST	_				_	April 11		
			Process				Retail	Whisale	Banking		Heath		Business	Federal	State &	Misc	Total All	Prog Mgr		- ONANGES
DOUGT/SERVICE SECTOR	-	Mfg (SM)	Mfg (SM)	Transp (SM)	(\$M)	Teicom (SM)	(\$M)	Distr (SM)	& Finance (SM)	(SM)	Services (\$M)	Education (SM)	Services (SM)	Gvmt (SM)	Loc Gvmt (SM)	Industries (\$M)	Industries (\$M)	Estmate (\$M)	Differenc	= CHANGES ACTUALLY MAKE
	-	(5M)	(586)	(580)	(SM)	(2M)	(580)	(5.61)	(SM)	(SM)	(\$80)	(386)	(500)	(550)	(SM)	(2M)	(3M)	(SM)	(%)	METUALLY IVINE
CTOR TOTAL		14687	7199	4214	1751	4063	2696	2813	14657	5282	5449	2050	5396	11406	7059	1300	90022			
ofessional Services		5194	2738	269	362	114 01276	257	410	2588	16001603	319	98	352	2600	2796	142	21004	20910	-94	
S Consulting		/1342	A44 686	67	/119	277 29X	56	90	588	420	78	26	96	517	744 776	35	5303	20010	-94	
ducation & Training		827	W 365	36	\ 81	185 199	38	60	375	232 242	45			455	420	/ 21	3228			
software Development	-	\$025	1687	166	62	788 848	153	260	1025	9651006	196	57	207	162%	1830	86	12833			
stems Integration		1631	447	225	634	293	409	211			310				0 1340	9	10241	10650	409	
quipment		957	172	78	206	78	242	67	198		107			1999		4	4614			
Professional Services		116	ZL 210	14	58 345		30 126	15			28 175			270 1296	64	1 4	762 4374	+		
Other	_/P	53	21	7	25	3	11	6	29		110	2	12	165	01 556 27	0	366	1		
	/	at and	604	237	70		432	247	2963	12301	171288	281	221	46,1823	1948	22	12451	12528	77	
teourcing latform Operations	- / 1	851	604	116	70	82 24	196	110		674	407	101 206	60			8	3942	12528	77	
oplications Operations		338	191 265 76	76	19	38	133	78	1446	522	CTC 462	.76	111	130712	1055	10	5341		-	
Desidop Services	- 11	0 115	76	25 20	9	10	60	34 25	352 318		00 157 142		26	178	214 225 260	3	1449	-		
Network Management Applications Manageme	7	04 99	45,00	20		10	99	20	125	102	142	7	20	CLU 145	260	- 2	125	+	_	
		-																		
cessing Services ransaction Processing		894 894	789 789	2268 2268	279 279		186 186	325 325						168 168	369 369	137	13632 13632	-		
July Processing	-	934	/09	2200	219	1193	100	325	4130	393	353	200	1/30	100	309	13/	13032	+		
Other Processing																				
twork Services		129	1110	427	32	142	271	411	897	258	671	254	691	1241	152	161	6847			
lectronic Information S	Svcs	62	941	309	29			79	792	193	386	163	670	323	56	150	4441	+		
letwork Applications		67	169		3		99		105		285	91		918		11	2406			
plications Softwere		2706	815	478	260	485	341	661	2356	997	1237	828	1192	708	219	284	13566			
fairframe	-	405	197	157	56	225	51	258	1028	351	414	85	118	106	63	13	3527	1		-/
Sinicomputer		1284	267	124	76	120	150	151	745			195	249	177	44	100	4143			NHADIGHER AN OF 5/1
Vorkstation/PC		1017	351	197	128	140	140	252	582	520	488	548	825	425	112	171	5896	+	_	CINIO 4 1 17014
rnkey Systems		3282	696		114		800	548			1071	262	975	1436	210	545	12281	-		HEVIECCE WINDAM
quipment software Products		1378	331 252		50 44		351 305	243 205						646 546		238	5298 4560			m
Yofessional Services	-	607	113		20		144	100						244		205	2323	+		+ (1)
																	2020			1
ports published or in		X	X	Х			Х .	Х	X		-	X	X			X			-	
				-				-			_		-						_	WHAT MEOUT
NOTES FIG	ures adju	sted (on th	is first pas	s) lo agree	with 4/11 e	stimates are	e in bold ita	ics												CHANGER AS OF 5/1 RECIFICATION CONTRACT THEYER
On	ly the del	very mode r problem	Not eggs	e been alter on dollars let	ea, me sub	adjustment	unless we	can change	e the Feder	ral scetor	-		_				-	+		
									1									1		
Fo	r now, I h	ive done tr	ne followin	9					-			-	-					-		
	(1)	djustments	s have be	en made to I	S and OS	to bring ther	n to agreen	nent with 4/	11 estimat	es	-		-							1
	3	ince we ar	e within \$	100M there	should not i	be any furth	er changes	needed										_		
	(2)	si is a probi	em Ther	e aren't end of the need	ugh dollars	IEΠ to absor	to the differ	ence, other	r than with r	ne Federal	sector		-				_	1		
	- 1	he other s	ectors are	to small to	absorb any	meaningful	additional:	spending_I	suggest th	at you spea	k							-		
				Delier to add																



1993 Information Services Expenditures for Use by IBM

9:46 AM 5/10/94

MVIBM.XLS	1		-			199	3 informa	tion Serv	ices							
WINDWALD .								Expendite					NO			-
Copyright 1994 by INPUT	-							ai industr					100			
6-May-94								ilions)							1	
O-may-5-4	+						(*	III					×17			-
	Discrete	Process				Relail	Whisale	Banking		Health		Business	Federal	State &	Misc	Total All
PRODUCT/SERVICE SECTOR	Mfg (\$M)	Mfg (\$M)	Transp (\$M)	Utilities (\$M)	Telcom (\$M)	Distr (\$M)	Distr (\$M)	& Finance (\$M)	Insurance (\$M)	Services (\$M)	Education (\$M)	Services (\$M)	Gvmt (\$M)	Loc Gymt (\$M)	Industries (\$M)	Industries (\$M)
SECTOR TOTAL	14687	7199	4214	1751	4128	2696	2813	14657	5317	5419	2050	5396	11366	6989	1300	89982
SESTENCE SESTE	1				127	61-65			1603	(-65)				27964	130	
Professional Services	5194	2738	269	362	1341		410		1668			352	2600	(3026		21364
- IS Consulting	1342	686	67	119	297	66	90		420	78		96	517	776		5303
- Education & Training	827	365	36	81	199	38	60		242	45		49	455	420		3228
- Software Development	3025	1687	166	162	845	153	260		1006	196		207	1628	1830	1140 (+ D.T.)	12833
Systems integration	1631	447	225	634	293	409	211	601	245	310		235	3730	1015	9	10116
- Equipment	957	172	78	206	78	242	67		39	107	41	58	1999	368		4614
- Software Products	116	44	14	58	20	30	15		22	28		31	270	64		762
- Professional Services	505	210	126	345	192	126	123		179	175	68	134	1296	556		4374
- Other	53	21	7	25	3	11	6	-	1451 (+3			12	165		475)	366
Outsourcing	851	604	237	70	82	432	247		1427	1258		221	1483	. (1998		12176
- Platform Operations	299	197	116	34	24	195			574	497		58	445	458		3942
- Applications Operations	338	265	76	19		133	78		522	462		111	712	1055		5341
- Desklop Services	115	76	25	9	10	60	34		179	157		26	178	225		1449
- Network Management	99	66	20	8	10	44	25	318 125	152	142		26	148	260	2	1320
- Applications Management	-															125
Processing Services	894	789	2268	279	1195	186	325		395	553		1730	168	369		13632
- Transaction Processing	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	13632
- Utility Processing - Other Processing																
Network Services	129	1110	427	32	142	271	411	897	258	671	254	691	1241	152		6847
- Electronic Information Svcs	62	941	309	29	116	172	79		193	386		670	323	56		4441
- Network Applications	67	169	118	3	26	99	332	105	65	285	91	21	918	96	11	2406
Applications Software	2706	815	478	260	485	341	661	2355	997	1237		1192	708	219		13566
- Mainframe	405	197	157	56	225	51	258		351	414		118	106	63		3527
- Minicomputer	1284	267	124	76	120	150	151	745	126	335		249	177	44		4143
- Workslation/PC	1017	351	197	128	140	140	252	582	520	488	548	825	425	112	171	5896
Turnkey Systems	3282	696	310	114	590	800	548		327	1071	262	975	1436	210		12281
- Equipment	1378	331	147	50		351	243		145	497	120	326	646	92		5298
- Software Products	1297	252	118	44		305	205		124			324	546	80		4660
- Professional Services	607	113	45	20	105	144	100	206	58	174	42	325	244	38	102	2323



1993 Information Services Expenditures for Use by IBM

12:48 PM 5/10/94

NOTES	Figures ac	usted (on this first pass) to agree with 4/11 estimates are in bold italics	П								
	Only the d	fivery mode totals have been altered, the sub-modes will be adjusted later	Т								
	Si is the only problem. Not enough dollars left to absorb adjustment, unless we can change the Federal scetor.										
	For now, I	ave done the following	t								
	(1)	Adjustments have been made to PS and OS to bring them to agreement with 4/1 1 estimates	t								
		Since we are within \$100M there should not be any further changes needed.	1								
	(2)	Si is a problem. There aren't enough dollars left to absorb the difference, other than with the Federal sector.	Т								
1		I've absorbed \$125M of the needed \$440M additional spending in the State&Loc sector.	T								
		The other sectors are to small to absorb any meaningful additional spending. I suggest that you speak	Т								
-		with Wilson and Bob Delier to add the balance of the adjustment (\$315M) to the Federal Si number. It would	1								
+		be less than a 1% increase.	T								



1993 Information Services Expendiitures for Use by IBM

MVIBM.XLS						199	3 Informa	tion Serv	rices							
						Act	ual User	Expendit	ures							
Copyright 1994 by INPUT						1	y Vertic	al Industr	ν							
6-May-94							(S Mi	llions)								
U-may 54							(*							1		
	Discrete	Process				Retail	Whisale	Banking		Health		Business	Federal	State &	Misc	Total Al
PRODUCT/SERVICE SECTOR	Mfg	Mfg	Transp	Utilities	Telcom	Distr	Distr	& Finance	Insurance	Services	Education	Services	Gvmt	Loc Gymt	Industries	Industrie
	(\$M)	(SM)	(SM)	(SM)	(\$M)	(\$M)	(SM)	(SM)	(\$M)	(SM)	(\$M)	(\$M)	(\$M)	(\$M)	(SM)	(\$M)
SECTOR TOTAL	14687	7199	4214	1751	4128	2696	2813	14657	5317	5419	2050	5396	11366	6989	1300	8998
Professional Services	5194	2738	269	362	1341	257	410	2588	1668	319	98	352	2600	3026	142	2136
- IS Consulting	1342	686	67	119	297	66	90	688	420	78	26	96	517	776	35	530
- Education & Training	827	365	36	81	199	38	60		242	45	15	49	455	420	21	322
- Software Development	3025	1687	166	162	845	153	260	1525	1006	196	57	207	1628	1830	86	1283
Systems Integration	1631	447	225	634	293	409	211	601	245	310		235	3730			1011
- Equipment	957	172	78	206	78	242	67	198		107	41	58	1999	368	4	461
- Software Products	116	44	14	58	20	30	15			28						76
- Professional Services	505	210	126	345	192	126	123			175			1296			437
- Other	53	21	. 7	25	3	11	6	29	5		2	12	165	27	0	36
Outsourcing	851	604	237	70	82	432	247	2963	1427	1258	281	221	1483	1998	22	1217
- Platform Operations	299	197	116	34	24	195	110			497	205	58	445			394
- Applications Operations	338	265	76	19	38	133	78			462	76		712			534
- Desktop Services	115	76	25	9	10	60	34			157		26				144
 Network Management 	99	66	20	8	10	44	25			142		26	148	260	2	132
- Applications Management								125								12
Processing Services	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	1363
- Transaction Processing	894	789	2268	279	1195	186	325	4138	395	553	206	1730	168	369	137	1363
- Utility Processing - Other Processing																
Network Services	129	1110	427	32	142	271	411		258	671	254		1241			684
Electronic Information Svcs Network Applications	62 67	941	309 118	29	116	172 99	79 332			386 285		670 21	323 918			240
- Ivelviols Applications	- 0,	103								200			310	- 30		240
Applications Software	2706	815	478	260	485	341	661			1237	828	1192	708			1356
- Mainframe	405	197	157	56	225	51	258			414						352
- Minicomputer	1284	267	124	76	120	150	151			335		249	177			414
- Workstation/PC	1017	351	197	128	140	140	252	582	520	488	548	825	425	112	171	589
Turnkey Systems	3282	696	310	114	590	800	548	1115		1071	262	975	1436	210	545	1228
- Equipment	1378		147	50	255	351	243			497	120		646			529
- Software Products	1297	252	118	44	230	305	205	430	124	400	100	324	546	80	205	466
- Professional Services	607	113	45	20	105	144	100	206	58	174	42	325	244	38	102	232





IT Intelligence Services

400 Frank W. Burr Blvd. Teaneck, NJ 07666 Tel. (201) 801-0050 Fax (201) 801-0441

FAX TRANSMITTAL FORM	
----------------------	--

To:	Date: Name:	\$ 13/9 1866.	4 # JOAN	UE P.	Confidential: Y/N Urgen Y/N
Tel f. From: Subject:	Co.: Fax No: Name:	9P /	Messon		Page: 1 of #O File: Chron / With Contact Other:
	Ha	e on the py	o - plu	se approve	Now 11
	5/13/9 To	14 - Aut -	MARINE TO THE RESIDENCE OF THE PROPERTY OF THE		
ACAD ST 18 74 W. 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	SEVI	TO ME	BOB, AND	D THE NO WITH THE WOS LUNITI	SKCPTION
ename com un en ell'Albrero e als commente e al significant de la significant de la seconda de	ONG Min) AND 7	THE EXCLUSION	N OF APPLI NG 1 FINA AGDEEMEN	CÂTIÔN NE
A 1889 97-792 - contact		- L.,			



IMPUT FORECAST WITH INFLATION BY INCUSTRY MODE 5/94

	1992	1993	
SEGMENTATION	(SH)	(SH)	
DISCRETE MANUFACTURING			
PROFFSSIONAL SERVICES	6822	5194	
7 HOT 1.	1192	1342	
CONSULTING	2880	3025	
SOFTWARE DEVELOPMENT	750	827	
EDUCATION/TRAINING	711	851	.4
SYSTEMS OPERATIONS	258	299	11/
PLATFORM OPERATIONS	300	338	7
APPLICATIONS OPERATIONS	DO-	358	() (
NETWORK MANAGEMENT	68		
DESKTOP SERVICES	85	115	
APPLICATIONS MANAGEMENT			
SYSTEMS INTEGRATION	420	505	
SOFTHARE DEVELOPMENT	226	272	
DESIGN/INTEGRATION	75	94	
PROJECT MGMT/CONSULTING	77	92	
EDUCATION/TRAINING	19	23	
OPERATIONS/MAINTENANCE	20	24	
TOTAL	6038	6665	
PROCESS MANUFACTURING			
PROFESSIONAL SERVICES	2370	2569	
CONSULTING	605	644	
SOFTWARE DEVELOPMENT	1430	1583	
EDUCATION/TRAINING	335	342	
SYSTEMS OPERATIONS	748	954	d
PLATFORM OPERATIONS	281	311	N.
APPLICATIONS OPERATIONS	344	419	1)
METHORIC MANAGEMENT	48	104	
DESKTOP SERVICES	75	120	
Drouge orestable			

180 210

98 115

27 31

12 13 3373 3853

32 38 11 13

APPLICATIONS MANAGEMENT

SOFTWARE DEVELOPHENT

SYSTEMS INTEGRATION

DESIGN/INTEGRATION PROJECT MONT/CONSULTING

EDUCATION/TRAINING OPERATIONS/MAINTENANCE

TOTAL



INPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

	1992	1993	
SEGMENTATION	(58)	(301)	
TRANSPORTATION			
PROFESSIONAL SERVICES	250	269	
CONSULTING	59	67	
SOFTWARE DEVELOPMENT	157	166	
EDUCATION/TRAINING	34	36	
SYSTEMS OPERATIONS	207	237	
PLATFORM OPERATIONS	103	116	A
APPLICATIONS OPERATIONS	70	76	
METWORK MANAGEMENT	14	20	
DESKTOP SERVICES	20	25	0.
APPLICATIONS MANAGEMENT			
SYSTEMS INTEGRATION	104	126	
SOFTWARE DEVELOPMENT	58	69	
DESIGN/INTEGRATION	17	21	
PROJECT NGHT/CONSULTING	21	26	
EDUCATION/TRAINING	5	6	
OPERATIONS/MAINTENANCE	3	4	
TOTAL	581	657	
UTILITIES		,	
PROFESSIONAL SERVICES	276	362	
CONSULTING	90	119	
SOFTMARE DEVELOPMENT	122	162	
EDUCATION/TRAINING	62	81	
SYSTEMS OPERATIONS	58	70/	
PLATFORM OPERATIONS	30	34	
APPLICATIONS OPERATIONS	16	19	. 11
NETWORK HANAGEMENT	5	8	NIL

7 9

308

173 193

44 49

63 71

18 20

10 12

647 786

345 🗸

DESKTOP SERVICES

SYSTEMS INTEGRATION

SOFTWARE DEVELOPMENT

DESIGN/INTEGRATION

EDUCATION/TRAINING

TOTAL

APPLICATIONS MANAGEMENT

PROJECT MONT/CONSULTING

OPERATIONS/MAINTENANCE



INPUT FORECAST WITH INFLATION BY INDUSTRY NODE 5/94

	1992	1993	
SEGNENTATION	(SM)	(SH)	
TELECOMUNICATIONS			
PROFESSIONAL SERVICES	1200	1250	
COMSULTING	252	277	
SOFTWARE DEVELOPMENT	788	788	
EDUCATION/TRAINING	160	185	
SYSTEMS OPERATIONS	73	82	
PLATFORM OPERATIONS	22	24	
APPLICATIONS OPERATIONS	35	38	
NETWORK MANAGEMENT	6	10	
DESKTOP SERVICES	10	10	
APPLICATIONS NANAGEMENT		10	
SYSTEMS INTEGRATION	154	192	
SOFTWARE DEVELOPMENT	86	107	
DESIGN/INTEGRATION	24	30	
PROJECT MONT/COMSULTING	30	37	
EDUCATION/TRAINING	6	8	
OPERATIONS/MAINTENANCE	8	10	
TOTAL	1437	1534	
RETAIL DISTRIBUTION			
PROFESSIONAL SERVICES	238	257	
CONSULTING	57	66	
SOFTWARE DEVELOPMENT	146	153	
EDUCATION/TRAINING	35	38	
SYSTEMS OPERATIONS	337	432	
PLATFORM OPERATIONS	113	195	
APPLICATIONS OPERATIONS	160	1.33	
NETWORK MANAGEMENT	33	44	
DESKTOP SERVICES	31	60	
APPLICATIONS MANAGEMENT			
SYSTEMS INTEGRATION	155	126	
SOFTWARE DEVELOPMENT	80	65	
DESIGN/INTEGRATION	31	25	
PROJECT NONT/CONSULTING	30	26	

761

EDUCATION/TRAINING OPERATIONS/MAINTENANCE

TOTAL



INPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

	1992	1993	
SECHENTATION	(SH)	(\$4)	
UNDLESALE DISTRIBUTION			
PROFESSIONAL SERVICES	378	410	
CONSULTING	85	90	
SOFTHARE DEVELOPMENT	237	260	
EDUCATION/TRAINING	56	60	
SYSTEMS OPERATIONS	213	247	
PLATFORM OPERATIONS	96	110	
APPLICATIONS OPERATIONS	72	78	
NETWORK MANAGEMENT	20	25	
DESKTOP SERVICES	25	34	
APPLICATIONS MANAGEMENT		~	3
SYSTEMS INTEGRATION	106	(122)	11-2-
SOFTWARE DEVELOPMENT	57	67	١
DESIGN/INTEGRATION	20	23	
PROJECT HONT/CONSULTING	19	22	
EDUCATION/TRAINING	5	5	
OPERATIONS/NAINTENANCE	5	5	
TOTAL.	722	813	
BANKING AND FINANCE			
PROFESSIONAL SERVICES	2379	2588	
CONSULTING	585	688	
SOFTMARE DEVELOPMENT	1468	1525	
EDUCATION/TRAINING	326	375	
SYSTEMS OPERATIONS	2571	2838	2963
DI ATECOM COURATIONS	044	Tron.	0762

841 722

235 352 125

287 335

143 167 57

1220 1446

275 318

67

57 67

15 17

15 17

5472 6113

PLATFORM OPERATIONS

APPLICATIONS OPERATIONS

NETWORK MANAGEMENT

APPLICATIONS MANAGEMENT SYSTEMS INTEGRATION

PROJECT MGNT/CONSULTING

OPERATIONS/NAINTENANCE

SOFTWARE DEVELOPMENT

DESIGN/INTEGRATION

EDUCATION/TRAINING

TOTAL

DESKTOP SERVICES



	1992	1993	
SEGMENTATION	(\$H)	(SH)	
INSURANCE			
PROFESSIONAL SERVICES	1569	1600	
CONSULTING	384	403	
SOFTWARE DEVELOPMENT	970	965	
EDUCATION/TRAINING	215	252	
SYSTEMS OPERATIONS	1213	1627	
PLATFORM OPERATIONS	498	574	
APPLICATIONS OPERATIONS	465	522	
NETWORK MANAGEMENT	110	152	
DESKTOP SERVICES	140	179	
APPLICATIONS NANAGEMENT			
SYSTEMS INTEGRATION	162	179	
SOFTWARE DEVELOPMENT	85	95	
DESIGN/INTEGRATION	32	36	
PROJECT MONT/CONSULTING	27	30	
EDUCATION/TRAINING	9	10	
OPERATIONS/HAINTENANCE	9	10	
TOTAL.	3084	3389	
MEDICAL			
PROFESSIONAL SERVICES	291	319	
CONSULTING	70	78	
SOFTWARE DEVELOPMENT	181	196	
EDUCATION/TRAINING	40	45	
SYSTEMS OPERATIONS	1126	1258	
PLATFORM OPERATIONS	453	497	
APPLICATIONS OPERATIONS	440	462	
NETWORK HARAGEMENT	103	162	
DESKTOP SERVICES	130	157	
APPLICATIONS HANAGEMENT	150		
SYSTEMS INTEGRATION	160	175	
SOFTWARE DEVELOPMENT	78	96	
		,,,	

DESIGN/INTEGRATION

EDUCATION/TRAINING

TOTAL

PROJECT MENT/CONSULTING

OPERATIONS/MAINTENANCE

22 28

24 31

8 10

1687 1909



	1992	1993	
SEGMENTATION	(84)	(SH)	
EDUCATION			
PROFESSIONAL SERVICES	98	98	
CONSULTING	23	26	
SOFTWARE DEVELOPMENT	54	57	
EDUCATION/TRAINING	13	15	
SYSTEMS OPERATIONS	245	281	
PLATFORM OPERATIONS	172	194	
APPLICATIONS OPERATIONS	65	76	
METHORK MANAGEMENT	5	7	
DESKTOP SERVICES	3	4	
APPLICATIONS MANAGEMENT			·
SYSTEMS INTEGRATION	59	68	
SOFTWARE DEVELOPMENT	33	37	
DESIGN/INTEGRATION	10	12	
PROJECT MGMT/COMSULTING	11	12	
EDUCATION/TRAINING	2	3	
OPERATIONS/MAINTENANCE	3	4	
TOTAL.	397	451	
BUSINESS SERVICES			
PROFESSIONAL SERVICES	326	352	
CONSULTING	85	96	
SOFTWARE DEVELOPMENT	195	207	
EDUCATION/TRAINING	46	49	
SYSTEMS OPERATIONS	183	221	
PLATFORM OPERATIONS	51	58	
APPLICATIONS OPERATIONS	95	111	
NETWORK HANAGEMENT	20	26	
DESKTOP SERVICES	17	26	- 1/
APPLICATIONS MANAGEMENT			•
SYSTEMS INTEGRATION	107	134	
SOFTWARE DEVELOPMENT	49	61	
DESIGN/INTEGRATION	23	29	
PROJECT MONT/CORSULTING	23	29	
EDUCATION/TRAINING	6	8	
OPERATIONS/NATHTENANCE	6	7	

TOTAL



IMPUT FORECAST WITH INFLATION BY INDUSTRY HODE 5/94

	1992	1993
SEGMENTATION	(SN)	(\$1()

SEGMENTATION	(SH)	(\$11)
FEDERAL GOVERNMENT		
PROFESSIONAL SERVICES	2128	2600
CONSULTING	420	517
SOFTWARE DEVELOPMENT	1364	1628
EDUCATION/TRAINING	344	455
SYSTEMS OPERATIONS	1760	1483
PLATFORM OPERATIONS	546	445
APPLICATIONS OPERATIONS	620	712
NETWORK MANAGEMENT	131	148
DESKTOP SERVICES	263	178
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	1701	1296
SOFTWARE DEVELOPMENT	913	696
DESIGN/INTEGRATION	262	200
PROJECT NGMT/CONSULTING	384	292
EDUCATION/TRAINING	86	66
OPERATIONS/MAINTENANCE	56	42
TOTAL	5852	5557
STATE & LOCAL GOVERNMENT		

STATE & LOCAL GOVERNMENT
PROFESSIONAL SERVICES
CONSULTING
SOFTWARE DEVELOPMENT

EDUCATION/TRAINING	482	402	
SYSTEMS OPERATIONS	1770	1998	
PLATFORM OPERATIONS	410	458	
APPLICATIONS OPERATIONS	975	1055	
METWORK NAMAGENERT	210	260	
DESKTOP SERVICES	175	225	
APPLICATIONS MANAGEMENT			
SYSTEMS INTEGRATION	485	556	
SOFTWARE DEVELOPMENT	261	298	
DESIGN/INTEGRATION	75	B6	
PROJECT MGMT/CONSULTING	109	125	
EDUCATION/TRAINING	24	29	
OPERATIONS/MAINTENANCE	16	18	
TOTAL	5270	5679	

2840 2900

718 744



	1992	1993	
SEGMENTATION	(\$96)	(\$81)	

SEGMENTATION	(391)	(102)	
MISCELLANEOUS INDUSTRIES			
PROFESSIONAL SERVICES	132	142	
CONSULTING	32	35	
SOFTWARE DEVELOPMENT	80	86	
EDUCATION/TRAINING	20	21	2
SYSTEMS OPERATIONS	20	(23)	22
PLAYFORM OPERATIONS	7	8	
APPLICATIONS OPERATIONS	9	10	
HETWIRK HANAGEMENT	2	2	
DESKTOP SERVICES	2	3	
APPLICATIONS MANAGEMENT			
SYSTEMS INTEGRATION	4	4	
SOFTWARE DEVELOPMENT	5	2	
DESIGN/INTEGRATION	- 1	1	
PROJECT NGMT/CONSULTING	1	1	
EDUCATION/TRAINING		*	
OPERATIONS/MAINTENANCE	*	*	

158 172

TOTAL



INPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

1992 1993

SEGNENTATION (SN) (SN)

GRAND TOTAL

PROFESSIONAL SERVICES CONSULTING. 4649 5192 SOFTWARE DEVELOPMENT 11800 12555

EDUCATION/TRAINING SYSTEMS OPERATIONS PLATFORM OPERATIONS 3881 4045 APPLICATIONS OPERATIONS

RETHORK NARAGEMENT DESICTOP SERVICES APPLICATIONS MANAGEMENT

SYSTEMS INTEGRATION (DOMM) SOFTWARE DEVELOPMENT DESIGN/INTEGRATION PROJECT NGMT/CONSULTING EDUCATION/TRAINING

OPERATIONS/NAINTENANCE SYSTEMS INTEGRATION (FED) SOFTHARE DEVELOPMENT DESIGN/INTEGRATION PROJECT NGMT/CONSULTING EDUCATION/TRAINING

OPERATIONS/NAINTENANCE TOTAL

19287 20910

2838 3163 11235 12402

5086 5495 1050 1365 1218 1497

2671 3077 1429 1644 461 530

524 605 135 158 122 160

1701 1296 913 696 262 200 384 292





IT Intelligence Services

1881 Landings Onve Mountain View, CA 94043-0848 Tel. (415) 961-3300 Fax (415) 961-3966

FAX TRANSMITTAL FORM

To:	Date: Name:	5/13/94 TOTHIN MEGANN	Confidential: Y/N Urgent: Y/N	
	Location:	N.T.		
From:	Co.: Fax No: Name:	JOHN MSGILURA WCATION: 94-99	Page: 1 of File: Chron Contact	
Subject:	50	WCATION: 94-99	/ Other:	
	HERE	ARE THE EXTENDED OTHER POR MAY-1949	VALUES FOR	



		-							
MVED.XLS			EDUC	ATION					
		Use	r Expendit	ures Fore	cast				
Copyright 1994 by INPI	IT			de, 1993-					
	<u> </u>	- 0, 0		lions)					
12-May-94			(\$ MIII	lionsj					
		-	l						
			Revision	1#1					
			-						CAGR
	1993	Growth 93-94	1994	1995	1996	1997	1998	1999	94-99
DELIVERY MODES				(\$)	(\$)	(\$)	(\$)	(\$)	(%)
	(\$)	(%)	(\$)	12%	12%	12%	12%	13%	(,
SECTOR TOTAL	205	0 12%	2290		2866	3211	3611	4064	12%
SECTOR TOTAL	203	0 12/4	2270	10%	11%	9%	10%	11%	
Professional Services		8 12%	110		134	146	161	178	10%
- IS Consulting		6 15%	30		39	42	48	55	13%
- Education & Training		5 13%	17		21	23	25	27	10%
- Software Developmen		7 11%	63		74	81	88	96	9%
				18%	20%	17X	15%	15%	
Systems Integration	12		140		198	231	266	305	17%
- Equipment		1 17%	48		67	79	91	105	17%
- Software Products		0 10%	11		16	19	22	25	18%
 Professional Services 	. 6	8 15%	78		111	129	148	170	17%
- Other		2 50%	3		4	4	5	18%	11%
				16%	16%		18%	730	17%
Outsourcing	28		326		290	525 346	408	483	17%
- Platform Operations	19		223			159	187	220	20%
 Applications Operation 	ns	76 18%	90		134		8	9	12%
- Desktop Services		4 25%	5		6	13	16	18	18%
 Network Managemer 	ıt	7 28%	8	2%	1%	2%	2%	2%	100
		-	212		220	224	. 229	233	2%
Processing Services		06 3%	212		220	224	229	233	2%
- Transaction Process	ing 20	36 3%	212	217	220	264	LL/		
- Utility Processing									
- Other Processing				17%	16%	16%	17%	17X	
Network Services	21	54 17%	298		404	469	547	638	16%
- Electronic Informatio		53 18%	192		263	307	359	420	17%
- Network Applications		91 16%	106		141	162	188	218	16%
- rectificity replications				12%	12%	11%	12%	12%	
Applications Softwar	e 8:	28 12%	927		1154	1282	1430	1595	11%
- Mainframe		85 1%	86	88	88	89	90	89	1%
- Minicomputer	11	95 8%	211	226	239	250	266	283	6%
- Workstation/PC	5	48 15%	630		827	943	1074	1223	14%
				6%	7%.	6%	7%	7%	
Turnkey Systems		62 6% -	27		315	334	359	385	7% 6%
- Equipment		20 6%	127		143	150	160	171	8%
- Software Products		00 5%	105		120	129	140	152	7%
 Professional Service 	S	42 7%	4	5 48	52	55	59	62	12
			Re	vision					
						animinal numb	hare for		
NOTE:	This version contains	changes to ou	tsourcing driv	en by the IBM	project. The	The 1992 Cor	nnondium		
	1983 through 1993 had values for platform and applications operations only. The 1993 Compendium had values for all four sub-modes and the amounts were unattributable. This change allows the								
	had values for all four	sub-modes as	nd the amount	s were unattrib	etwatered wa	w. No change	to the		
	future addition of value outsourcing or educta	es for desktop	and network	spending in a	bance to the	text of the re	nort		
	is necessary, since on	uon industry i	ouris nas occi	arred, and no c	resent in a	idition no ch	ange is		
	necessary for th recon	ry the global o	outsourcing ar	No made land	d ambe				



ADM 341/06 8/83



IT Intelligence Services

400 Frank W. Burr Blvd. Teaneck, NJ 07666 Tel. (201) 801-0050 Fax (201) 801-0441

FAX TRANSMITTAL FORM

То:	Date:	John	Mc Gilv	ray	Confidential: Urgent:	
Tel.	/Location:	HAMILIAN WATER				
	Co.:	11111 Marian W.	A A MARKA PARAMETER		Page: 1 of	2
	Fax No:	**************************************			File: Chrom	
From:	Name:		a a subsequence of the subsequen		Contact Other:	
Subject			An and the state of the state o			
	Co	rrection Educati		and the property of the state o		
		Should	be ones			
	M F # 1 const. and entitlements have the case on the case of the c	on for	spering 5	heet		
	· · · · · · · · · · · · · · · · · · ·	R194	T ? '	/ u	6(1)	es es a sistema com em de di
_	no. Al la del 194 pp elemente l'estate e 174 s'en e le principal del 194 pp pe 176 de 186 represent de 198 pp		John			-, of of \$1 and \$1
			44-44 \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$			
		a Marca 11 h (* * * * * * * * * * * * * * * * * *	on and the construction or administrate to the first paging gain on an annual actions.			
gg		er ent ent menn i na nasy (in fil) (1) (i) en ent for a translate minera tel stabilit tel	AM 11 (100) 100 (100) 100 (100) 100 (100) 100 (100)			
Trace as an worker as about	14 mary 1		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		with a manifold of the property of the same of the sam	M-04-14 ***********************************
					and the same of th	-
	166 t pt pro: non-su non-sude sa co con-co H	BITTOTAL COLUMN TO SERVICE STATE OF THE SERVICE STA	and the first of the Half second seco	gg=1-1-00-00-00-00-00-00-00-00-00-0-0-00-00	y	topica tota dia accesso alla



TABLE A

IMPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

	41	ZNOOSIK	PODE .	77.74						
	1992	1993	1994	1995	1996	1997	1998	1999	2000	CAGR
SEGNENTATION	(\$8)	(SH)	(SH)	(SH)	(\$H)	(SH)	(SH)	(\$8)	(SH)	93-98
EDUCATION										
PROFESSIONAL SERVICES	90	98	110	121	135	148	162	179	11%	11%
CONSULTING	23	26	30	33	39	43	48	54	13X	13%
SOFTWARE DEVELOPMENT	54	57	63	69	75	82	89	97	9%	9%
EDUCATION/TRAINING	13	15	17	19	21	23	25	28	11%	
SYSTEMS OPERATIONS	245	281	323	377	444	532	628	895	17%	17%
PLATFORM OPERATIONS	172	194	60	66	74	83	92	79	-14%	-14%
APPLICATIONS OPERATIONS	65	76	187	217	252	302	393	480	36%	
NETWORK MANAGEMENT	5	7	36	40	45	54	61	94	54%	54%
DESKTOP SERVICES	3	- 4	40	54	73	93	122	242	98%	98%
APPLICATIONS NANAGEMENT	_		46.					0		
SYSTEMS INTEGRATION	59	68	79	92	113	131	155	183	18%	18%
SOFTWARE DEVELOPMENT	33	37	43	51	62	72	85	100	18%	18%
DESIGN/INTEGRATION	10	12	14	16	20	23	27	32	18%	18%
PROJECT MGMT/CONSULTING	11	12	14	16	20	23	27	32	18%	18%
EDUCATION/TRAINING	2	3	3	4	4	5	6	7	15%	15%
OPERATIONS/HAINTENANCE	3	4	5	5	7	8	10	12	20%	20%
TOTAL	397	451	552	644	765	904	1067	1499	19%	19%
BUSINESS SERVICES										
PROFESSIONAL SERVICES	326	352	376	408	441	477	517	559	8%	8%
CONSULTING	85	96	106	119	133	149	167	187	12%	12%
SOFTWARE DEVELOPMENT	195	207	218	232	246	260	276	292	6%	6%
EDUCATION/TRAINING	46	49	52	57	62	68	74	80	9%	9%
SYSTEMS OPERATIONS	183	221	262	319	380	454	548	661	20%	20%
PLATFORK OPERATIONS	51	58	65	74	83	95	107	121	13%	13%
APPLICATIONS OPERATIONS	95	111	133	162	191	225	270	323	19%	19%
NETWORK NANAGENERY	20	26	31	38	46	57	69	84	22%	22%
DESKTOP SERVICES	17	26	33	45	60	77	102	134	31%	31%
APPLICATIONS NANAGEMENT								0		
SYSTEMS INTEGRATION	107	134	141	163	202	250	309	365	18%	18%
SOFTWARE DEVELOPMENT	49	61	65	75	92	114	141	167	18%	18%
DESIGN/INTEGRATION	23	29	30	35	43	54	67	79	18%	18%
PROJECT HONT/CONSULTING	23	29	30	35	43	54	67	79	18%	18%
EDUCATION/TRAINING	6	8	8	9	12	14	17	20	16%	16%
OPERATIONS/WAINTENANCE	6	7	8	9	12	14	17	20	19%	19%
TOTAL.	633	753	812	935	1083	1258	1476	1720	15%	15%



FAX TRANSMITTAL FORM

ADM 341/05 B/93



IT Intelligence Services

400 Frank W. Burr Blvd. Teaneck, NJ 07666 Tel. (201) 801-0050 Fax (201) 801-0441

To:	Date: Name: Location:	5/12 John r		asket farmers	Con	fidential: Urgent:	
	Co.: Fax No: Name:	John			-	Chron Contact Other:	10
		Change blocks those	so us	Sha and brown	ratures	to san	
413 1413 1413 1414			36				
			The state of the s				



TABLE

INPUT FORECAS BY INDUSTR

1992 1993 SECHENTATION (SH) (SH)

. 05/12/94 15:13

DISCRETE NAMUFACTURING PROFESSIONAL SERVICES 4822 5194 1192 1342 CONSULTING SOFTWARE DEVELOPMENT 2880 3025 750 827 EDUCATION/TRAINING SYSTEMS OPERATIONS 711 851 PLATFORM OPERATIONS 258 299 APPLICATIONS OPERATIONS 300 338 NETWORK MANAGEMENT 68 99 85 115 DESKTOP SERVICES APPLICATIONS MANAGEMENT

620 505 SYSTEMS INTEGRATION SOFTMARE DEVELOPMENT 226 272 DESIGN/INTEGRATION 78 94 PROJECT MONT/CONSULTING 77 92 19 23 EDUCATION/TRAINING OPERATIONS/WAINTENANCE 20 24 6665

6038 TOTAL

PROCESS MANUFACTURING PROFESSIONAL SERVICES 2370 CONSULTING 605 1430 SOFTWARE DEVELOPMENT 335

342 EDUCATION/TRAINING SYSTEMS OPERATIONS 748 954 PLATFORM OPERATIONS 281 311 419 APPLICATIONS OPERATIONS 344 NETWORK HANAGERENT 48 104 75 120 DESKTOP SERVICES

APPLICATIONS MANAGEMENT 180 210 SYSTEMS INTEGRATION 98 115 SOFTWARE DEVELOPMENT DESIGN/INTEGRATION 27 31 32 38 PROJECT NGMT/CONSULTING 11 13 EDUCATION/TRAINING OPERATIONS/MAINTERANCE 12 13

TOTAL

3373 3853

2569

644



TABLE

IMPUT	FORECAS
BY	INDUSTR

	1992	1993
SEGMENTATION	(94)	(\$01)
RAMSPORTATION		
PROFESSIONAL SERVICES	250	269
CONSULTING	59	67
SOFTWARE DEVELOPMENT	157	166
EDUCATION/TRAINING	34	36
SYSTEMS OPERATIONS	207	237
PLATFORM OPERATIONS	103	116
APPLICATIONS OPERATIONS	70	76
HETHORIC MANAGEMENT	14	20
DESKTOP SERVICES	20	25
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	104	126
SOFTWARE DEVELOPMENT	58	69
DESIGN/INTEGRATION	17	21
PROJECT MONT/CONSULTING	21	26
EDUCATION/TRAINING	5	6
OPERATIONS/MAINTENANCE	3	4
TOTAL	581	657
TILITIES		
PROFESSIONAL SERVICES	274	362
CONSULTING	90	119
SDFTWARE DEVELOPMENT	122	162
EDUCATION/TRAINING	62	81
SYSTEMS OPERATIONS	58	70
PLATFORM OPERATIONS	30	34
APPLICATIONS OPERATIONS	16	19
METHORK MANAGEMENT	5	8
DESKTOP SERVICES	7	9
APPLICATIONS HANAGENERY		
SYSTEMS INTEGRATION	308	345

SOFTWARE DEVELOPMENT

DESIGN/INTEGRATION PROJECT MENT/CONSULTING

EDUCATION/TRAINING

TOTAL

OPERATIONS/MAINTENANCE

173 193 49

63 71

18 20

10 12



TABLE

INPUT FORECAS BY INDUSTR

> 8 10

> 7 6 6

- 7

761 875

257

1437 1534

1992 1993

SEGMENTATION. (SH) (381)

TELECOMMUNICATIONS 1250 PROFESSIONAL SERVICES 1200 CONSULTING 252 277 SOFTWARE DEVELOPMENT 788 788 FORCATTOM/TRAINING 160 185 SYSTEMS OPERATIONS 73 82 PLATFORM OPERATIONS 22 24 APPLICATIONS OPERATIONS 35 38 NETWORK HANAGEMENT 10 DESKTOP SERVICES 10 10 APPLICATIONS MANAGEMENT SYSTEMS INTEGRATION 154 192 SOFTWARE DEVELOPMENT 86 107 DESIGN/INTEGRATION 24 30 30 PROJECT MGMT/CONSULTING 37 EDUCATION/TRAINING 6 8

OPERATIONS/MAINTENANCE TOTAL

RETAIL DISTRIBUTION PROFESSIONAL SERVICES

> 57 CONSULTING 66 SOFTWARE DEVELOPMENT 146 153 35 38 EDUCATION/TRAINING

337 432 SYSTEMS OPERATIONS PLATFORM OPERATIONS 113 195 133 APPLICATIONS OPERATIONS 160

44 NETWORK MANAGEMENT 33 31 60 DESKTOP SERVICES APPLICATIONS MANAGEMENT

SYSTEMS INTEGRATION 155 126 SOFTWARE DEVELOPMENT 80 65 31 25 DESIGN/INTEGRATION PROJECT MONT/CONSULTING 24

OPERATIONS/MAINTENANCE TOTAL

EDUCATION/TRAINING



TABLE

IMPUT FORECAS BY INDUSTR

> 722 813

> > 67

57 57 67

15 17

15 17 5472 6113

1002 1003 SEGMENTATION. (N2) (SN)

UNOLESALE DISTRIBUTION PROFESSIONAL SERVICES 378 410 85 90 CONSULTING SOFTWARE DEVELOPMENT 237 260 56 60 EDUCATION/TRAINING 213 247 SYSTEMS OPERATIONS PLATFORM OPERATIONS 96 110 72 78 APPLICATIONS OPERATIONS 25 NETWORK NANAGEMENT 20 DESKTOP SERVICES 29 34 APPLICATIONS MAKAGEMENT 122 SYSTEMS INTEGRATION 106 SOFTWARE DEVELOPMENT 57 67 20 23 DESIGN/INTEGRATION 19 22 PROJECT MGMT/CONSULTING EDUCATION/TRAINING 5 5 5 5 OPERATIONS/MAINTENANCE

BANKING AND FINANCE PROFESSIONAL SERVICES 2379 2588 CONSULTING 585 688 SOFTWARE DEVELOPMENT 1468 1525 EDUCATION/TRAINING 326 375 2838 2571 SYSTEMS OPERATIONS PLATFORM OPERATIONS 841 722 APPLICATIONS OPERATIONS 1220 1446 NETWORK MANAGEMENT 275 318 352 DESKTOP SERVICES 235 APPLICATIONS MANAGEMENT SYSTEMS INTEGRATION 287 335 SOFTWARE DEVELOPMENT 143 167

DESIGN/INTEGRATION

EDUCATION/TRAINING OPERATIONS/MAINTENANCE

TOTAL

PROJECT MENT/CONSULTING



INPUT	FORECAS

SEGMENTATION	(\$H)	(SH)	
INSURANCE		_	
PROFESSIONAL SERVICES	1569	1600	\ 0
CONSULTING	384	403	
SOFTWARE DEVELOPMENT	970	965	/
EDUCATION/TRAINING	215	232	
SYSTEMS OPERATIONS	1213	1427	
PLATFORM OPERATIONS	498	574	
APPLICATIONS OPERATIONS	465	522	
HETWORK MANAGEMENT	110	152	
DESKTOP SERVICES	140	179	
APPLICATIONS MANAGEMENT			
CVCTCMC INTEGRATION	142	470	

SOFTWARE DEVELOPMENT DESIGN/INTEGRATION

AOI LEGATE DETERMINE	0,5	23
DESIGN/INTEGRATION	32	34
PROJECT NGMT/CONSULTING	27	30
EDUCATION/TRAINING	9	10
OPERATIONS/MAINTENANCE	9	10
TOTAL	3084	3385
EDICAL		
PROFESSIONAL SERVICES	291	319
CONSULTING	70	78
SOFTWARE DEVELOPMENT	181	196
EDUCATION/TRAINING	40	45
SYSTEMS OPERATIONS	1126	1258.
PLATFORM OPERATIONS	453	497
APPLICATIONS OPERATIONS	440	662
WEYWORK MANAGEMENT	103	142
DESKTOP SERVICES	130	157
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	140	175
SOFTWARE DEVELOPMENT	78	96
DESIGN/INTEGRATION	22	28
PROJECT MONT/CONSULTING	24	31
EDUCATION/TRAINING	8	10
OPERATIONS/MAINTENANCE	8	10
TOTAL	1687	1909



PLATFORM OPERATIONS

NETWORK MANAGEMENT

DESKTOP SERVICES

APPLICATIONS OPERATIONS

APPLICATIONS HANAGEMENT SYSTEMS INTEGRATION

SOFTWARE DEVELOPMENT

PROJECT MONT/CONSULTING EDUCATION/TRAINING

DPERATIONS/MAINTENANCE

DESIGN/INTEGRATION

TOTAL

TABLE

INPUT FORECAS BY INDUSTR

	1992	1093
SEGNENTATION	(98)	(\$M)
EDUCATION		
PROFESSIONAL SERVICES	90	98
CONSULTING	23	26
SOFTWARE DEVELOPMENT	54	57
EDUCATION/TRAINING	13	15
SYSTEMS OPERATIONS	220	281
PLATFORM OPERATIONS	50	205 4
APPLICATIONS OPERATIONS	140	76
NETWORK MANAGEMENT	15	0 4
DESKTOP SERVICES	15	0
APPLICATIONS MANAGEMENT		_
SYSTEMS INTEGRATION	59	68
SOFTWARE DEVELOPMENT	33	37
DESIGN/INTEGRATION	10	12
PROJECT MONT/CONSULTING	11	12
EDUCATION/TRAINING	2	3
OPERATIONS/NAINTENANCE	3	4
TOTAL	384	447
BUSINESS SERVICES		
PROFESSIONAL SERVICES	326	352
CONSULTING	85	96
SOFTWARE DEVELOPMENT	195	207
EDUCATION/TRAINING	46	49
SYSTEMS OPERATIONS	183	221

51 58

95 26

20

17 26

107 134 49 61

23 23 29

6 8 6 7

633 733

111



TABLE

178

1296

696

5852 5557

2840 / 2900

710 746

INPUT FORECAS BY INDUSTR

DI INDUST

1992 1993 (\$N) (\$H)

SEGMENTATION

FEDERAL GOVERNMENT
PROFESSIONAL SERVICES 2128 2600
CONSULTING 420 517

1628 SOFTWARE DEVELOPMENT 1364 EDUCATION/TRAINING 344 455 SYSTEMS OPERATIONS 1760 1483 445 PLATFORM OPERATIONS 546 APPLICATIONS OPERATIONS 820 712 NETWORK MANAGENERY 131 148

DESKTOP SERVICES 263
APPLICATIONS MANAGEMENT

SYSTEMS INTEGRATION 1701
SOFTWARE DEVELOPMENT 913

TOTAL

STATE & LOCAL GOVERNMENT PROFESSIONAL SERVICES CONSULTING

APPLICATIONS OPERATIONS 9/5 1055
NETWORK MANAGEMENT 210 260
DESKYOP SERVICES 175 225
APPLICATIONS MANAGEMENT



→→→ MT VIEW

IMPLIT	FORECAS

158 172

	BT .	WD024K	
	1992	1993	
SEGMENTATION	(591)	(3H)	
MISCELLANEOUS INDUSTRIES			
PROFESSIONAL SERVICES	132	142	
CONSULTING	32	35	
SOFTWARE DEVELOPMENT	80	86	
EDUCATION/TRAINING	20	21	
SYSTEMS OPERATIONS	20	23	
PLATFORM OPERATIONS	7	8	
APPLICATIONS OPERATIONS	9	10	
NETWORK MANAGEMENT	2	2	
DESKTOP SERVICES	2	3	
APPLICATIONS MANAGEMENT			
SYSTEMS INTEGRATION	4	- 4	
SOFTWARE DEVELOPMENT	2	2	
DESIGN/INTEGRATION	1	1	
PROJECT MGMT/CONSULTING	1	1	
EDUCATION/TRAINING		at .	
OPERATIONS (VALINTENANCE		*	



→→→ MT VIEW

TABLE

IMPUT FORECAS BY INDUSTR

1992 1993

913 696

262 200

34869 37685

SEGMENTATION (SM) (SM)

GRAND TOTAL

19287 20910 PROFESSIONAL SERVICES 4649 5192 CONSULTING SOFTWARE DEVELOPMENT 11800 12555 EDUCATION/TRAINING 2638 3163 SYSTEMS OPERATIONS 11210 12402 3759 4056 PLATFORM OPERATIONS APPLICATIONS OPERATIONS 5161 5495 NETWORK MANAGEMENT 1060 1358 DESKTOP SERVICES 1230 1493 APPLICATIONS MANAGEMENT SYSTEMS INTEGRATION (COM) 2671 3077 SOFTWARE DEVELOPMENT 1429 1644 DESIGN/INTEGRATION 461 530 524 605 PROJECT MONT/CONSULTING 135 158 EDUCATION/TRAINING OPERATIONS/MAINTENANCE 122 140 SYSTEMS INTEGRATION (FED) 1701 1296

PROJECT MENT/CONSULTING 384 292
EDUCATION/TRAINING 86 66
OPERATIONS/MAINTENANCE 56 42

SOFTWARE DEVELOPMENT

DESIGN/INTEGRATION





IT Intelligence Services

400 Frank W. Burr Blvd. Teaneck, NJ 07666 Tel. (201) 801-0050 Fax (201) 801-0441

FAX TRANSMITTAL FORM	
dulay	

To:	Name:	John	Mestly	ay Box	6 ZJ.	Urgent Y/N
Tel. From: Subject:		JAG.	/P he cho		Pe	orge: 1 of
			New	ewer v	Toth	



Ø002/004

Aut 9:30 \$4/94 TABLE A

TABLE

					HADEL A						
	INPUT	FORECAS		IMPUT	FORECAST	WITH	INFLATI	ON			
	BY	ENDUSTR			INDUSTRY						
	1992			1992	1993	1994	1995	1996	1997	1998	
SEGMENTATION	(5H)	(SH)	SEGMENTATION	(5H)	(\$M)	(SH)	(SH)	(5H)	(\$H)	(5)()	
DISCRETE MANUFACTURING			DISCRETE NAMUFACTURING								
PROFESSIONAL SERVICES	4822	5194	PROFESSIONAL SERVICES	4822	5194	5572	5983	6434	6929	7508	
CONSULTING	1192	1342	CONSULTING	1192	1362	1493	1687	1906	2154	2434	
SOFTWARE DEVELOPMENT	2880	3025	SOFTWARE DEVELOPMENT .	2880	3025	3171	3298	3430	3567	3745	
EDUCATION/TRAINING	750	827	EDUCATION/TRAINING AA	750	827	908	998	1098	1208	1329	
SYSTEMS OPERATIONS	781	851	SYSTEMS OPERATIONS	781	851	1126	1364	1656	2012	2455	
PLATFORM OPERATIONS	256	299	PLATFORM OPERATIONS	256	299	327	367	411	468	516	
APPLICATIONS OPERATIONS	351	338	APPLICATIONS OPERATIONS	351	338	506	617	753	919	1116	
NETWORK MARAGEMENT	94	99	NETWORK MANAGEMENT	1 94	99	145	178	219	270	333	
DESKTOP SERVICES	80	115	DESKTOP SERVICES	80	115	148	202	273	363	490	
APPLICATIONS MANAGEMENT			APPLICATIONS NANAGEMENT	10	919			6.7 4	300	470	
SYSTEMS INTEGRATION	739	916	SYSTEMS INTEGRATION	739	505	1073	1293	1601	1942	2362	
SOFTWARE DEVELOPMENT	398	492	SOFTWARE DEVELOPMENT	308	272		697	862	1046	1272	
DESIGN/INTEGRATION	137	170	DESIGN/INTEGRATION	137	94 170		240	298	361	439	
PROJECT MONT/CONSULTING	135	167	PROJECT NGMT/CONSULTING	135	92:0		236	292	355	432	
EDUCATION/TRAINING	33	42	EDUCATION/TRAINING	33	23 4		58	72	37		
OPERATIONS/HAINTENANCE	36	43	OPERATIONS/RAINTENANCE	36	24 43		62		-	106	
TOTAL.	6422	7074	TOTAL	6422		7919	8842	77 9964	93 11246	113	
PROCESS MANUFACTURING		-1			2519		,				
PROFESSIONAL SERVICES	2370	2569	PROCESS MANUFACTURING	\							
CONSULTING	605	644	PROFESSIONAL SERVICES	2370	2758 64586	3042	3491	3998	4583	5260	
SOFTWARE DEVELOPMENT	1430	1583	CONSULTING	605		767	862	1015	1165	1340	
EDUCATION/TRAINING	335	342	SOFTMARE DEVELOPMENT	7 1430	1587	1900	2210	2568	2970	3445	
SYSTEMS OPERATIONS	898	1 954	V .		34365	375	399	423	448	475	
PLATFORM OPERATIONS	271	311	SYSTEMS OPERATIONS 95		1506 8S	1	1437	1765	2095	2502	
APPLICATIONS OPERATIONS	426	419		/1 27	1 786.7	349	337	438	486	544	
					37265	593	700	826	975	1150	
NETWORK MANAGEMENT	109	104		of 109	9366	/147	169	196	235	274	
DESKTOP SERVICES	92	120		100 92	10776 /	168	231	305	399	534	
APPLICATIONS MANAGEMENT			APPLICATIONS MANAGEMENT	/\	_/						
SYSTEMS INTEGRATION	170	210	SYSTEMS INTEGRATION	1/10	210	214	244	282	322	368	
SOFTWARE DEVELOPMENT	93	115	SOFTMAKE DEVELOPMENT	93	115	118	135	154	178	204	
BESIGN/INTEGRATION	25	31	DESIGN/INTEGRATION	25	31	32	37	42	48	55	
PROMECT MGMT/CONSULTING	30	38	PROJECT MENT/CONSULTING	30	38	36	42	50	56	63	
EDUCATION/TRAINING	11	13	EDUCATION/TRAINING	11	13	13	15	18	20	23	
OPERATIONS/MAINTENANCE	11	13	OPERATIONS/NAINTENANCE	11	13	13	15	18	20	23	
TOTAL	3530	3853	TOTAL.	3530	3628	4681	5403	6350	7399	8664	1



OPERATIONS/MAINTENANCE

875 791

TOTAL

18

		TABLE			TABLE	A				
	INPUT	FORECAS		INPLIT	FORECAS	Y WITH	INFLATI	ON		
	ВУ	INDUSTR		BY	INDUSTR	Y MODE	5/94			
	1992	1993		1992	1993	1994	1995	1996	1997	1
SEGMENTATION	(SH)	(34)	SEGMENTATION .	(NZ)	(\$21)	(SH)	(\$4)	(\$#)	(\$H)	÷
			0510	alta . col	18	0				
TELECOMMUNICATIONS			TELECOMMUNICATIONS ()	JVN 1200						
PROFESSIONAL SERVICES	1200	1250	PROFESSIONAL SERVICES	1200	1341	1 ¹⁵⁶⁵	1831	2132	2485	2
CONSULTING	252	277	CONSULTING	252	2979	350	415	491	580	
SOFTWARE DEVELOPMENT	788	788	SOFTWARE DEVELOPMENT	788	DAD I	980	1136	1305	1500	1
EDUCATION/TRAINING	160	185	EDUCATION/TRAINING	160	1991	\$ 235	280	336	405	
SYSTEMS OPERATIONS	182	82	SYSTEMS OPERATIONS C	F 182	182	235	285	333	391	
PLATFORM OPERATIONS	68	24	PLATFORM OPERATIONS	5 68	Her 245	Ja 78	99	109	120	
APPLICATIONS OPERATIONS	73	38	APPLICATIONS OPERATIONS	OF 73	38 8	31 97	111	128	152	
NETWORK MANAGEMENT	23	10	NETWORK MANAGEMENT	23	10 4	≥~ 29	33	39	46	
DESKTOP SERVICES	18	10/	DESKTOP SERVICES	18	10 5	31	42	57	73	
APPLICATIONS MANAGEMENT			APPLICATIONS NAMAGEMENT							
SYSTEMS INTEGRATION	145	192	SYSTEMS INTEGRATION	145	192	212	256	311	377	
SOFTHARE DEVELOPMENT	81	107	SOFTWARE DEVELOPMENT	81	107	118	143	173	210	;
DESIGN/INTEGRATION	23	30	DESIGN/INTEGRATION	23	30	34	41	50	61	
PROJECT MGMT/CGMSULTING	28	37	PROJECT NENT/CONSULTING	28	37	41	50	60	73	
EDUCATION/YRAINING	6	8	EDUCATION/TRAINING	6	8	9	10	13	15	
OPERATIONS/WAINTENANCE	7	10	OPERATIONS/MAINTENANCE	7	10	10	12	15	18	
TOTAL	1545	1534	TOTAL	1545	1625	2043	2414	2633	3326	3
RETAIL DISTRIBUTION			RETAIL DISTRIBUTION							
PROFESSIONAL SERVICES	238	257	PROFESSIONAL SERVICES	238	257	275	295	316	340	3
CONSULTING	57	66	CONSULTING	57	66	69	76	84	92	
SOFTWARE DEVELOPMENT	146	153	SOFTWARE DEVELOPMENT	146	153	165	176	186	199	;
EDUCATION/TRAINING	35	38	EDUCATION/TRAINING	35	38	41	43	46	49	
SYSTEMS OPERATIONS	349	432	SYSTEMS OPERATIONS	349	432	533	649	794	962	111
PLATFORM OPERATIONS	146	195	PLATFORM OPERATIONS	146	195	211	242	279	323	2
APPLICATIONS OPERATIONS	127	133	APPLICATIONS OPERATIONS	127	133	197	264	303	370	- 4
NETWORK MANAGEMENT	42	44	NETWORK MANAGEMENT	42	44	65	81	101	127	
DESICTOP SERVICES	34	60	DESKTOP SERVICES	34	66	60	82	111	162	
APPLICATIONS HANAGEMENT			APPLICATIONS MANAGEMENT		54	et				
SYSTEMS INTEGRATION	170	126	SYSTEMS INTEGRATION	170	126	250	298	364	441	
SOFTWARE DEVELOPMENT	87	65	SOFTWARE DEVELOPMENT	87	65	128	152	186	225	:
DESIGN/INTEGRATION	34	25	DESIGN/INTEGRATION	34	25	50	59	72	87	
PROJECT MGNT/CONSULTING	33	26	PROJECT MONT/CONSULTING	33	24	48	57	70	85	1
EDUCATION/TRAINING	8	6	EDUCATION/TRAINING	8	6	12	15	18	22	

OPERATIONS/MAINTENANCE



		TABLE		10	TABLE				
	INPUT	FORECAS	aN	NA INSTITUTE	FORECAS	T WITH	INFLAT	TOM	
	BY	INDUSTR	NETURA ORGANICA	Og . BA	INDUSTR	MODE.	5/94		
	1992	1993	olice	1992	1993	1994	1995	1996	1997
SEGMENTATION	(SN)	(84)	SEGMENTATION	(SM)	(\$H)	(\$H)	(\$81)		
EDUCATION			EDUCATION	1	ac	4			
PROFESSIONAL SERVICES	90	98	PROFESSIONAL SERVICES	90	98	110	121	135	148
CONSULTING	23	26	COMSULTING		26	30	33		
SOFTWARE DEVELOPMENT	54	57	SOFTHARE DEVELOPMENT	54	57	63	69	75	
EDUCATION/TRAINING	13	15	EDUCATION/TRAINING	7 / 13	15	17	19	21	
SYSTEMS OPERATIONS	244	261	SYSTEMS OPERATIONS	244	281/	323	377	444	532
PLATFORN OPERATIONS	50	205	PLATFORM OPERATIONS	by 50	205 5	50	66	74	
APPLICATIONS OPERATIONS	140	76	APPLICATIONS OPERATIONS	140	761	187	217	252	302
NETWORK MANAGEMENT	30	8	HETWORK MANAGEMENT	30	03	3/36	40	45	
DESKTOP SERVICES	24	0	DESKYOP SERVICES	24	103	40	54	73	
APPLICATIONS MANAGEMENT			APPLICATIONS MANAGEMENT		- 44				
SYSTEMS INTEGRATION	59	68	SYSTEMS INTEGRATION	59	68	79	92	113	131
SOFTWARE DEVELOPMENT	33	37	SOFTSIARE DEVELOPMENT	33	37	43	51	62	
DESIGN/INTEGRATION	10	12	DESIGN/INTEGRATION	10	12	16	16	20	23
PROJECT HGNT/CONSULTING	11	12	PROJECT NGMT/CONSULTING	11	12	14	16	20	23
EDUCATION/TRAINING	2	3	EDUCATION/TRAINING	5	3	3	4	4	5
OPERATIONS/MAINTENANCE	3	4	OPERATIONS/MAINTENANCE	3	4	5	5	7	8
TOTAL	417	447	TOTAL	417	447	552	644	765	904
BUSINESS SERVICES			BUSINESS SERVICES						
PROFESSIONAL SERVICES	326	352	PROFESSIONAL SERVICES	326	352	376	408	667	477
CONSULTING	85	96	CONSULTING	85	96	106	119	133	149
SOFTWARE DEVELOPMENT	195	207	SOFTWARE DEVELOPMENT	195	207	218	232	246	260
EDUCATION/TRAINING	46	49	EDUCATION/TRAINING	46	49	52	57	62	68
SYSTEMS OPERATIONS	181	221	SYSTEMS OPERATIONS	181	221	262	319	380	454
PLATFORM OPERATIONS	51	58	PLATFORM OPERATIONS	51	58	65	74	83	95
APPLICATIONS OPERATIONS	89	111	APPLICATIONS OPERATIONS	89	111	133	162	191	225
NETWORK NANAGEMENT	22	26	RETHORK WARAGEMENT	22	26	31	38	46	57
DESKTOP SERVICES	19	26	DESKTOP SERVICES	19	26	33	45	60	77
APPLICATIONS MANAGEMENT			APPLICATIONS MANAGEMENT		20	33	4.7	60	- 11
SYSTEMS INTEGRATION	88	134	SYSTEMS INTEGRATION	88	134	141	163	202	250
SOFTWARE DEVELOPMENT	40	61	SOFTWARE DEVELOPMENT	40	61	65	75	92	116
DESIGN/INTEGRATION	19	29	DESIGN/INTEGRATION	19	29	30	35	43	54
PROJECT MONT/CONSULTING	19	29	PROJECT MONT/CONSULTING	19	29	30	35	43	54
EDUCATION/TRAINING	5	8	EDUCATION/TRAINING	5	8	8	9	12	14
OPERATIONS/MAINTENANCE	5	7	OPERATIONS/MAINTENANCE	5	7	a	9	12	14
TOTAL	614	733	TOTAL,	616	733	812	935	1083	1258





400 Frank W. Burt Blvd. Teaneck, NJ 07666 Tel. (201) 801-0050 Fax (201) 801-0441

FAX TRANSMITTAL FORM

~	Date:	10	Confidential: Y/N
To:	Name:	Bob Goodwan John Mc Alway	7
Tel./	Location:		~
	Co.:		Page: 1 of
	Fax No:		File: Chron
From:	Name:	A / MG.	Contact
Subject:		0 / 0	Other:
		fires the corrected #5	
****	<i> </i>	Leves	the Man of the Control of the Contro
	•••••		
			1 cm (4)7+20+20+30+301 & 2m -1994 mb 12 m 1

**** # ## # ******			and the state of t
		18 0 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
			T till Milliad har da resen sir reser en nædensværen resent het av 194 i di de
			an anger a state angung on habit de * på hå å å de state og nor ha stat en entre e
	· · · · · · · · · · · · · · · · · · ·		



TO

		IMILE			TABLE	A			
	IMPUT	FORECAS		THE	FORECAS				
	37	INDUSTR			INDUSTR			TION	
	1992	1993		1992					
SEGMENTATION	(\$H)	(39()	SEGMENTATION	(\$91)		1994	1999	,	96
FEDERAL GOVERNMENT						()	(JAN)	(\$	1)
PROFESSIONAL SERVICES	2128	2600	FEDERAL GOVERNMENT						
CONSULTING	420	517	PROFESSIONAL SERVICES	2128	2600	2212	2355	250	no
SOFTWARE DEVELOPMENT	1364	162B	COMMULTING	420	517	437	464		
EDUCATION/TRAINING	344	455	SOFTWARE DEVELOPHENT	1364	1628	1433	1574		
SYSTEMS OPERATIONS	1989	1483	EDUCATION/TRAINING	344	455	342	317		
PLATFORM OPERATIONS	619		SYSTEMS OPERATIONS	1989	1483	2523	2956		
APPLICATIONS OPERATIONS	945	445	PLATFORM OPERATIONS	619	445	763	839	92	
NETWORK MANAGEMENT	237	712	APPLICATIONS OPERATIONS	945	712	1206	1484	169	~
DESKTOP SERVICES	188	148	NETWORK MANAGEMENT	237	148	298	334	38	_
APPLICATIONS MANAGEMENT	188	178	DESKTOP SERVICES	188	178	256	297	35	_
SYSTEMS INTEGRATION	1701		APPLICATIONS MANAGEMENT				271	23	3
SOFTWARE DEVELOPMENT	913	1296	SYSTEMS INTEGRATION	1538	1296	1921	2150		
DESIGN/INTEGRATION		696	SOFTWARE DEVELOPMENT	826	696	1032		239	•
PROJECT MONT/CONSULTING	262	200	DESIGN/INTEGRATION	237	200	296	1155	1289	
EDUCATION/TRAINING	384	292	PROJECT MENT/CONSULTING	347	292	433	33z	370	
OPERATIONS/NAINTENANCE	86	66	EDUCATION/TRAINING	78	66		485	541	•
TOTAL	56	42	OPERATIONS/MAINTENANCE	50	62	97	108	121	
	6006	5557	TOTAL	5843		63 69127	7758	75 8603	
TATE & LOCAL GOVERNMENT						1	1/	000	
PROFESSIONAL SERVICES	2840	2900	STATE & LOCAL GOVERNMENT		240)	10	C	/	
CONSULTING	710	744	PROFESSIONAL SERVICES	2840	3026	427	3825	4271	
SOFTWARE DEVELOPMENT	1728	1754	CONSULTING	710	778	885	1000	1150	
EDUCATION/TRAINING	402	402	SOFTWARE DEVELOPMENT	1728	183802		2280	2541	
SYSTEMS OPERATIONS	1752	100R	EDUCATION/TRAINING	402		479	527	580	
PLATFORM OPERATIONS	407	45R	SYSTEMS OPERATIONS	1752		308	2840	3740	
APPLICATIONS OPERATIONS	953	1055	PLATFORM OPERATIONS	407	-	511	567	629	
HETWORK MANAGEMENT	217		APPLICATIONS OPERATIONS	953			1675	1711	
DESKTOP SERVICES	175	250	HETWORK MANAGEMENT	217		323	398		
APPLICATIONS MANAGEMENT	175	225	DESKTOP SERVICES	175		292	400	489	
SYSTEMS INTEGRATION			APPLICATIONS MANAGEMENT			C7E	400	540	
SOFTWARE DEVELOPMENT	484	556	SYSTEMS INTEGRATION	484	556	708			
DESIGN/INTEGRATION	260	298	SOFTWARE DEVELOPMENT	260			856	1037	
PROJECT MENT/CONSULTING	75	86	DESIGN/INTEGRATION	75		280	460	557	
EDUCATION/TRAINING	109	125	PROJECT NONT/CONSULTING	109		109	132	160	
OPERATIONS/MAINTENANCE	26	29	EDUCATION/TRAINING	24		60	193	234	
TAI.	16	18	OPERATIONS/MAINTENANCE	16		36	43	52	
//AL	5251 5	679	TOTAL	-	18 805 68	23 26 7	28 921	34	
						. ,	721	9217	71



MD.

		TABLE			TABLE A	1			()	///
	IMPUT	FORECAS		INPUT	FORECAST	HTIU	INFLATI	ON		
	BY	INDUSTR		BY	INDUSTRY	MODE	5/94			
	1992	1993		1992	1993	1994	1995	1996	1997	1998
SEGMENTATION	(\$81)	(SM)	SEGMENTATION	(SH)	(SH)	(SH)	(SM)	(SH)	(\$4)	(SH)
EDUCATION			EDUCATION							
PROFESSIONAL SERVICES	90	98	PROFESSIONAL SERVICES	90	96	110	121	135	148	162
COMSULTING	23	26	CONSULTING	23	26	30	33	39	43	48
SOFTWARE DEVELOPMENT	54	57	SOFTWARE DEVELOPMENT	54	57	63	69	75	82	89
EDUCATION/TRAINING	13	15	EDUCATION/TRAINING	13	15	17	19	21	23	25
SYSTEMS OPERATIONS	244	281	SYSTEMS OPERATIONS	244	281	323	377	444	532	628
PLATFORM OPERATIONS	50	55	PLATFORM OPERATIONS	50	205 \$	60	66	74	83	92
APPLICATIONS OPERATIONS	140	162	APPLICATIONS OPERATIONS	140	76 1	187	217	252	302	353
NETWORK PANAGEMENT	30	33	NETWORK NAMAGEMENT	30	033	3 36	40	45	54	61
DESKTOP SERVICES	24	31	DESKTOP SERVICES	24	03	40	54	73	93	122
APPLICATIONS MANAGEMENT			APPLICATIONS MANAGEMENT		-					
SYSTEMS INTEGRATION	59	68	STSTEMS INTEGRATION	59	6B	79	92	113	131	155
SOFTWARE DEVELOPMENT	33	37	SOFTHARE DEVELOPMENT	33	37	43	51	62	72	85
DESIGN/INTEGRATION	10	12	DESIGN/INTEGRATION	10	12	14	16	20	23	27
PROJECT NGMT/CONSULTING	11	12	PROJECT NONT/CONSULTING	11	12	14	16	20	23	27
EDUCATION/TRAINING	2	3	EDUCATION/TRAINING	2	3	3	4	4	5	6
OPERATIONS/MAINTENANCE	3	4	OPERATIONS/MAINTENANCE	3	4	5	5	7	8	10
TOTAL	417	478	TOTAL	417	447	552	644	765	904	1067
BUSINESS SERVICES			BUSINESS SERVICES							
PROFESSIONAL SERVICES	326	352	PROFESSIONAL SERVICES	326	352	376	408	441	477	517
CONSULTING	85	96	CONSISTING	85	96	106	119	133	149	167
SOFTWARE DEVELOPMENT	195	207	SOFTWARE DEVELOPMENT	195	207	218	232	246	260	276
EDUCATION/TRAINING	46	49	EDUCATION/TRAINING	66	40	52	57	62	68	74
SYSTEMS OPERATIONS	181	Z21	SYSTEMS OPERATIONS	181	221	262	319	380	454	548
PLATFORM OPERATIONS	51	58		51	58	65	74	83	95	107
APPLICATIONS OPERATIONS	90	111	PLATFORM OPERATIONS							
METHORY MANAGEMENT	22	26	APPLICATIONS OPERATIONS	89	111	133	162	191	225	270
DESKTOP SERVICES	19	26	NETWORK MANAGEMENT	22	26	31	-	46	57	
APPLICATIONS MANAGEMENT	19	20	DESKTOP SERVICES	19	26	33	45	60	77	102
SYSTEMS INTEGRATION			APPLICATIONS MANAGEMENT	-					77.0	
	88	134	SYSTEMS INTEGRATION	88	134	141	163	202	250	309
SOFTWARE DEVELOPMENT	40	61	SOFTWARE DEVELOPMENT	40	61	65	75	92	114	141
DESIGN/INTEGRATION	19	29	DESIGN/INTEGRATION	19	29	30	35	43	54	67
PROJECT MENT/CONSULTING	19	29	PROJECT MENT/CONSULTING	19	29	30	35	43	54	67
EDUCATION/TRAINING	5	8	EDUCATION/TRAINING	5	8	8	9	12	14	17
OPERATIONS/MAINTENANCE	5	7	OPERATIONS/MAINTENANCE	5	7	8	9	12	14	17
TOTAL	614	733	TOTAL	614	733	812	935	1983	1258	1476



TABLE

TABLE A IMPUT FORECAS INPUT FORECAST WITH INFLATION BY INOUSTR BY INDUSTRY MODE 5/94 SEGMENTATION (142) (SN) SECHENTATION (SH) (\$11) (SN) (SN) (SH) (SN) INSURANCE I HSLIRANCE PROFESSIONAL SERVICES PROFESSIONAL SERVICES 1668 1833 420 43 480 1006 40 1078 CONSULTING CONSULTING SOFTWARE DEVELOPMENT SOFTWARE DEVELOPMENT FOURATION/TOATHTHE 242 23² 275 EDUCATION/TRAINING SYSTEMS OPERATIONS SYSTEMS OPERATIONS PLATFORM OPERATIONS 45A PLATFORM OPERATIONS APPLICATIONS OPERATIONS APPLICATIONS OPERATIONS KETHORK MANAGEMENT NETWORK MANAGEMENT DESKTOP SERVICES DESKTOP SERVICES APPLICATIONS NAMAGEMENT APPLICATIONS NANAGEMENT SYSTEMS INTEGRATION SYSTEMS INTEGRATION SOFTWARE DEVELOPMENT SOFTWARE DEVELOPMENT DESIGN/INTEGRATION DESIGN/INTEGRATION PROJECT MENT/CONSULTING PROJECT HOMT/CONSULTING EDUCATION/TRAINING EDUCATION/TRAINING OPERATIONS/MAINTENANCE OPERATIONS/HAINTENANCE Q TOTAL TOTAL MEDICAL MEDICAL PROFESSIONAL SERVICES PROFESSIONAL SERVICES DONSULTING CONSULTING SOFTWARE DEVELOPMENT SOFTWARE DEVELOPMENT EDUCATION/TRAINING EDUCATION/TRAINING SYSTEMS OPERATIONS SYSTEMS OPERATIONS 125A PLATFORM OPERATIONS PLATFORM OPERATIONS APPLICATIONS OPERATIONS APPLICATIONS OPERATIONS NETWORK NANAGEMENT NETWORK MANAGEMENT DESCTOR SPRVICES DESKTOP SERVICES APPLICATIONS MANAGEMENT APPLICATIONS MANAGEMENT SYSTEMS INTEGRATION SYSTEMS INTEGRATION SOFTWARE DEVELOPMENT SOFTWARE DEVELOPMENT DESIGN/INTEGRATION DESIGN/INTEGRATION TO 7.5 PROJECT HOMT/CONSULTING PROJECT MORT/CONSULTING EDUCATION/TRAINING A EDUCATION/TRAINING OPERATIONS/HAINTENANCE OPERATIONS/NAINTENANCE TOTAL TOTAL



		TABLE			TABLE A					
	THOSET	FORECAS		INPUT	FORECAST	MITH	INFLATIO	IM		
		IMDUSTR		BY	INDUSTRY	MODE	5/94			
	1992	1993		1992	1993	1994	1995	1996	1997	199
SEGMENTATION	(SH)	(\$H)	SEGMENTATION	(SH)	(\$9()	(SM)	(\$91)	(SH)	(3H)	(SH
VHOLESALE DISTRIBUTION			WHOLESALE DISTRIBUTION							
PROFESSIONAL SERVICES	378	410	PROFESSIONAL SERVICES	378	410	434	466	500	538	57
CONSULTING	85	90	CONSULTING	85	90	99	109	120	132	14
SOFTWARE DEVELOPMENT	237	260	SOFTMARE DEVELOPMENT	237	260	272	291	310	332	35
FOUCATION/TRAINING	56		EDUCATION/TRAINING	56	60	63	66	70	74	7
SYSTEMS OPERATIONS	229	247	SYSTEMS OPERATIONS	229	247	308	359	423	502	59
	118		PLATFORM OPERATIONS	118	110	151	168	191	218	24
PLATFORM OPERATIONS	118		APPLICATIONS OPERATIONS	58	78	75	86	98	116	13
APPLICATIONS OPERATIONS	29	25	NETWORK MANAGEMENT	29	25	41	49	59	71	8
NETWORK HANAGEMENT	29	34 .	DESKTOP SERVICES	24	34	41	56	75	97	12
DESKTOP SERVICES	24	34	APPLICATIONS MANAGEMENT							
APPLICATIONS HANAGEMENT		122	SYSTEMS INTEGRATION	102	122	134	159	184	215	25
SYSTEMS INTEGRATION	102		SOFTWARE DEVELOPMENT	55	67	74	86	100	116	12
SOFTWARE DEVELOPMENT	55		DESIGN/INTEGRATION	19	23	25	29	34	39	4
DESIGN/INTEGRATION	19		PROJECT HGMT/CONSULTING	18	22	23	30	34	40	ı
PROJECT MGHT/CONSULTING	18		EDUCATION/TRAINING	5	5	6	7	8	10	- 1
EDUCATION/TRAINING	5		OPERATIONS/MAINTENANCE	5	5	6	. 7	8	10	1
OPERATIONS/MAINTENANCE	5	_	TOTAL	733	813	917	1040	1182	1352	155
TOTAL	733	813	1012							
BANKING AND FINANCE -			BANKING AND FINANCE			2858	3125	3363	3616	390
PROFESSIONAL SERVICES	2379	2588	PROFESSIONAL SERVICES	2379		6P8		898	978	10:
CONSULTING	585	688	CONSISTING	585	-				2115	225
SOFTWARE DEVELOPMENT	1468	1525	SOFTWARE DEVELOPMENT	1468		1760		1998		5.
EDUCATION/TRAINING	326	375	EDUCATION/TRAINING	326		410		483	523	72:
SYSTEMS OPERATIONS	2458	2538	SYSTEMS OPERATIONS	2458		3455		4990	5989	19:
PLATFORM OPERATIONS	854	722	PLATFORM OPERATIONS	854		1129		1493	1732	27.
APPLICATIONS OPERATIONS	1042	1646	APPLICATIONS OPERATIONS	1042		1414		1952	2323	
NETWORK MAKAGEMENT	310		NETWORK MANAGEMENT	310		473		733	894	111
DESKTOP SERVICES	252		DESKTOP SERVICES	252	352	439	602	812	1040	13:
APPLICATIONS MANAGEMENT	-		APPLICATIONS MANAGEMENT							
SYSTEMS INTEGRATION	269	335	SYSTEMS INTEGRATION	265		366		532	681	8.
SOFTWARE DEVELOPMENT	131		SOFTWARE DEVELOPMENT	131		181		264	338	4
DESIGN/INTEGRATION	53		DESIGN/INTEGRATION	53		73		106	136	1.
PROJECT MENT/CONSULTING	53		PROJECT NGMT/CONSULTING	53		72		106	135	τ
EDUCATION/TRAINING	14	-	EDUCATION/TRAINING	14	17	20		28	36	
	14		OPERATIONS/MAINTENANCE	14	17	20		25	36	
OPERATIONS/HAINTENANCE	5354		TOTAL.	5354	6113	7118	8320	9697	11326	133



. 12

	INPUT	FORECAS
	BY	INDUSTR
	1992	1993
SEGMENTATION	(\$91)	(SH)
TELECOPPLANICATIONS		
PROFESSIONAL SERVICES	1200	1250
CONSULTING	252	277
SOFTWARE DEVELOPMENT	788	788
EDUCATION/TRAINING	160	185
SYSTEMS OPERATIONS	182	183
PLATFORM OPERATIONS	68	54
APPLICATIONS OPERATIONS	73	84
METHORIC MANAGEMENT	23	26
DESKTOP SERVICES	18	25
APPLICATIONS NANAGEMENT		
SYSTEMS INTEGRATION	145	192
SOFTWARE DEVELOPMENT	R1	107
DESIGN/INTEGRATION	23	30
PROJECT MONT/CONSULT7MG	28	37
EDICATION/TRAINING	6	8
QPERATIONS/MAINTENANCE	7	10
TOTAL	1545	1666
-	1,543	1040
ETAIL DISTRIBUTION		
PROFESSIONAL SERVICES	238	257
CONSULTING	57	66
SOFTWARE DEVELOPMENT	146	153
EDUCATION/TRAINING	35	38
SYSTEMS OPERATIONS	349	432
PLATFORM OPERATIONS	146	195
APPLICATIONS OPERATIONS	127	133
NETWORK MANAGEMENT	42	44
DESKTOP SERVICES	34	60
APPLICATIONS NAMAGEMENT		
SYSTEMS INTEGRATION	170	126
SUFTWARE DEVELOPMENT	87	65
DESIGN/INTEGRATION	34	25
PROJECT NGMT/CONSULTING	33	24
EDUCATION/TRAINING	8	6
	8	6 -
OPERATIONS/MAINTENANCE		

TABLE

CONSULTING

TOTAL

RETAIL DISTRIBUTION

SOFTWARE DEVELOPMENT

EDUCATION/TRAINING

PLATFORM OPERATIONS

NETWORK NANAGEMENT

DESKTOP SERVICES

APPLICATIONS OPERATIONS

APPLICATIONS MANAGEMENT SYSTEMS INTEGRATION

PROJECT MONT/CONSULTING

OPERATIONS/MAINTENANCE

SOFTWARE DEVELOPMENT

DESIGN/INTEGRATION

EDUCATION/TRAINING

TOTAL

SYSTEMS OPERATIONS

ž

ı

A

CONSULTING



		TABLE			TABLE A				
	IMPUT	FORECAS		INPUT	FORECAST	WITH	INFLATI	ON	
	BY	INDUSTR		ET	INDUSTRY	HODE	5/94		
	1992	1993		1992	1993	1994	1995	1996	1997
SEGMENTATION	(SH)	(N2)	SEGMENTATION	(\$81)	(SH)	(94)	(SH)	(SH)	(SM)
TRANSPORTATION			TRANSPORTATION						
PROFESSIONAL SERVICES	250	269	PROFESSIONAL SERVICES	250	269	286	308	329	350
CONSULTING	59	67	CONSULTING	59	67	73	80	88	972
SOFTWARE DEVELOPMENT	157	166	SOFTWARE DEVELOPMENT	157	166	173	185	195	205
EDUCATION/TRAINING	34	36	EDUCATION/TRAINING	34	36	40	43	46	42
SYSTEMS OPERATIONS	215	237	SYSTEMS OPERATIONS	215	237	294	342	396	464
PLATFORM OPERATIONS	109	116	PLATFORM OPERATIONS	109	116	135	148	165	183
APPLICATIONS OPERATIONS	58	76	APPLICATIONS OPERATIONS	. 58	76	78	91	105	123
NETWORK HANAGEMENT	26	20	HETWORK HANAGEMENT	26	20	41	49	56	69
DESKTOP SERVICES	22	25	DESKTOP SERVICES	22	25	40	54	70	89
APPLICATIONS NANAGEMENT			APPLICATIONS NANAGEMENT						
SYSTEMS INTEGRATION	103	126	SYSTEMS INTEGRATION	103	126	151	181	224	268
SOFTWARE DEVELOPMENT	57	69	SOFTWARE DEVELOPMENT	57	69	83	100	123	148
DESIGN/INTEGRATION	17	21	DESIGN/INTEGRATION	17	21	25	31	38	45
PROJECT MONT/CONSULTING	21	26	PROJECT MGMT/CONSULTING	21	26	31	36	45	54
EDUCATION/TRAINING	5	6	EDUCATION/TRAINING	5	6	7	8	10	12
OPERATIONS/NAINTENANCE	3	4	OPERATIONS/WAINTENANCE	3	4	5	6	8	9
TOTAL	590	657	TOTAL	590	657	771	885	1019	1171
UTILITIES			UTILITIES						
PROFESSIONAL SERVICES	274	362	PROFESSIONAL SERVICES	274	362	411	468	530	603
CONSILTING	90	119	CONSULTING	90	129	135	155	177	205
SOFTWARE DEVELOPMENT	122	162	SOFTWARE DEVELOPMENT	122	162	184	209	234	264
EDUCATION/TRAINING	62	81	EDUCATION/TRAINING	62	81	92	104	119	134
SYSTEMS OPERATIONS	55	70	SYSTEMS OPERATIONS	55	70	71	83	97	113
PLATFORM OPERATIONS	29	34	PLATFORM OPERATIONS	29	34	35	39	44	49
APPLICATIONS OPERATIONS	16	19	APPLICATIONS OPERATIONS	16	19	18	21	24	28
HETWORK HANAGENERT	7	8	NETWORK HANAGEMENT	7	8	9	11	12	15
DESKTOP SERVICES	5	9	DESKTOP SERVICES	5	9	9	12	17	21
APPLICATIONS MANAGEMENT	-	,	APPLICATIONS NAMAGEMENT	- 1					
SYSTEMS INTEGRATION	280	345	SYSTEMS INTEGRATION	280	345	354	397	446	soc
SOFTWARE DEVELOPMENT	157	103	SOFTWARE DEVELOPMENT	157	193	198	223	250	280
DESIGN/INTEGRATION	40	40	DESIGN/INTEGRATION	40	49	51	57	64	74
PROJECT NGMT/CONSULTING	57	71	PROJECT MGNT/CONSULTING	57	71	72	81	91	102
EDUCATION/TRAINING	16	20	EDUCATION/TRAINING	16	29	20	22	25	22
OPERATIONS/MAINTENANCE	10	12	OPERATIONS/MAINTENANCE	10	12	13	14	16	78
TOTAL			TOTAL	616	786	845	960	1090	1237
TOTAL	614	786	IOIAL	014	.00		,,,,		





TABLE

	INPUT	FORECAS
	BY	INDUSTR
	1992	1993
SEGMENTATION	(SH)	(SH)
NISCELLANEOUS INDUSTRIES		
PROFESSIONAL SERVICES	132	142
CONSULTING	32	35
SOFTWARE DEVELOPMENT	80	86
EDUCATION/TRAINING	20	21
SYSTEMS OPERATIONS	20	23
PLATFORM OPERATIONS	8	8
APPLICATIONS OPERATIONS	12	10
HETWORK MANAGEMENT		2
DESKTOP SERVICES		3
APPLICATIONS MANAGEMENT		
SYSTEMS INTEGRATION	3	4
SOFTWARE DEVELOPMENT	1.5	2
DESIGN/ENTEGRATION	0.6	1
PROJECT HOMY/CONSULTING	0.9	1
EDUCATION/TRAINING		
OPERATIONS/NAINTENANCE	*	
TOTAL	155	172



TABLE

35597 38095

INPUT FORECAS BY INDUSTR 1993 SEGMENTATION (\$4) (39) GRAND TOTAL PROFESSIONAL SERVICES 19287 20910 CONSULTING 4649 5192 SOFTWARE DEVELOPMENT 11800 12555 EDUCATION/TRAINING 2838 3163 SYSTEMS OPERATIONS 11705 12403 PLATFORM OPERATIONS 3892 3904 APPLICATIONS OPERATIONS 5203 5583 NETWORK MANAGEMENT 1438 1394 DESKTOP SERVICES 1172 1522 APPLICATIONS MANAGEMENT SYSTEMS INTEGRATION (COMM) 2904 3486 SOFTWARE DEVELOPMENT 1553 1864 DESIGN/INTEGRATION 506 606 PROJECT MGMT/CONSULTING 565 680 EDUCATION/TRAINING 146 177 OPERATIONS/NAINTENANCE 135 159 SYSTEMS INTEGRATION (FED) 1701 1296 SOFTHARE DEVELOPMENT 913 696 DESIGN/INTEGRATION 262 200 PROJECT NGMT/CONSULTING 384 292 EDUCATION/TRAINING 86 66 OPERATIONS/MAINTENANCE 56 42

TOTAL





Forecast Data Base and Reconciliation

Appendix B provides the forecast data base (Exhibit B-1) and a reconciliation of this year's forecast with the previous year's (Exhibit B-2).

EXHIBIT B-1

Telecommunications Sector User Expenditure Forecast by Delivery Mode, 1991-1997

Delivery Modes	1991 (\$ M)	Growth 91-92 (%)	1992 (\$ M)	1993 (\$ M)	1994 (\$ M)	1995 (\$ M)	1996 (\$ M)	1997 (\$ M)	92-97 (%)
Sector Total	3,107	15	3,582	4,140	4,789	5,538	6,411	7,425	16
Processing Services	928	14	1,058	1,217	1,400	1,610	1,851	2,129	15
- Transaction Processing	928	14	1,058	1,217	1,400	1,610	1,851	2,129	15
Turnkey Systems	472	12	529	592	664	743	832	932	- 12
Applications Software Products	344	19	410	489	586	701	841	1,008	20
- Mainframe	174	15	200	230	265	304	350	402	15
- Minicomputer	82	22	100	122	149	182	222	270	22
- Workstation/PC	88	25	110	137	172	215	269	336	25
Systems Operations	65	12	73	83	94	106	120	135	13
Systems Integration	198	19	235	285	345	417	505	611	21
Professional Services	999	16	1,159	1,333	1,533	1,762	2,027	2,331	15
Network Services	101	17	118	141	167	199	235	279	19
- Electronic Info. Svcs.	83	17	97	115	135	160	188	222	18
- Network Applications	18	17	21	26	32	39	47	57	22



TAM O'FEARERTY Source of DATA? 5/11/94

TABLE A

INPUT FORECAST WITH INFLATION BY INDUSTRY NODE 5/94

				-,						
	1992	1993	1994	1995	1996	1997	1998	1999	CAGR	
SEGMENTATION	(90)	(\$11)	(\$H)	(\$H)	(\$H)	(SH)	(SN)	(\$H)	93-98	
DISCRETE MANUFACTURING										
PROFESSIONAL SERVICES	4822	5194	5572	5983	6434	6929	7508		8%	
CONSULTING	1192	1342	1493	1687	1906	2154	2434		13%	
SOFTWARE DEVELOPMENT	2880	3025	3177	3298	3430	3567	3745		4%	
EDUCATION/TRAINING	750	827	908	998	1098	1208	1329		10%	
SYSTEMS OPERATIONS	781	851	1126	1364	1656	2012	2455		24%	
PLATFORN	256	299	327	367	411	460	516		12%	
APPLICATIONS	351	338	506	617	753	919	1116		27%	
NETWORK	94	99	145	178	219	270	333		27%	
DESKTOP	80	115	148	202	273	363	490		34%	
SYSTEMS INTEGRATION	739	505	3073	1293	1601	1942	2362		36%	
SOFTWARE DEVELOPMENT	398	272	578	697	862	1046	1272		36%	
DESIGN/INTEGRATION	137	94	199	240	298	361	439		36%	
PROJECT HIGHT/CONSULTING	135	92	196	236	292	355	432		36%	
EDUCATION/TRAINING	33	23	48	58	72	87	106		36%	
OPERATIONS/HAINTENANCE	36	24	52	62	77	93	113		36%	
TOTAL	6422	6665	7919	8842	9964	11246	12815		14X	
									ERR	
PROCESS MANUFACTURING									ERR	
PROFESSIONAL SERVICES	2370	2738	3042	3491	3998	4583	5260		14%	
CONSULTING	605	686	767	882	1015	1165	1340		14%	
SOFTWARE DEVELOPMENT	1438	1687	1988	2210	2560	2970	3445		15%	
EDUCATION/TRAINING	335	365	375	399	423	448	475		5%	
SYSTEMS OPERATIONS	898	604	1257	1437	1765	2095	2502		33%	
PLATFORM	271	197	349	337	43B	486	544		23%	
APPLICATIONS	426	265	593	709	826	975	1150		34%	
NETWORK	109	66	147	169	196	235	274		33%	
DESKTOP	92	76	168	231	305	399	534		48%	
SYSTEMS INTEGRATION	170	210	214	244	282	322	368		12%	
SOFTWARE DEVELOPMENT	93	115	118	135	154	178	204		12%	
DESIGN/INTEGRATION	25	31	32	37	42	48	55		12%	
PROJECT MGMT/CONSULTING	30	38	38	42	50	56	63		11%	
EDUCATION/TRAINING	11	13	13	15	18	20	23		12%	
OPERATIONS/MAINTENANCE	11	13	13	15	18	20	23		12%	
TOTAL	3530	3628	4681	5403	6350	7399	8664		19%	



TABLE A

INPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

	1992	1993	1994	1995	1996	1997	1998	1999	CAGR
SEGMENTATION	(NA)	(90)	(\$91)	(\$H)	(SH)	(SH)	(SH)	(\$4)	93-9B
TRANSPORTATION									ERR
PROFESSIONAL SERVICES	250	269	286	308	329	350	370		7%
CONSULTING	59	67	73	80	88	97	107		10%
SOFTWARE DEVELOPMENT	157	166	173	185	195	205	210		5%
EDUCATION/TRAINING	34	36	40	43	46	48	53		8%
SYSTEMS OPERATIONS	215	237	294	342	396	464	54B		18%
PLATFORM	109	116	135	148	165	183	203		12X
APPLICATIONS	58	76	78	91	105	123	143		13%
METHORIC	26	20	41	49	56	69	84		33%
PESICTOP	22	25	40	54	70	89	118		36%
SYSTEMS INTEGRATION	103	126	151	181	224	268	324		21%
SOFTWARE DEVELOPMENT	57	69	83	100	123	148	180		21%
DESIGN/INTEGRATION	17	21	25	31	38	45	54		21%
PROJECT MGMT/COMSULTING	21	26	31	36	45	54	65		20%
EDUCATION/TRAINING	5	6	7	8	10	12	14		18%
OPERATIONS/MAINTENANCE	3	4	5	6	8	9	11		22%
TOTAL	590	657	771	885	1019	1171	1360		16%
									ERR
UTILITIES									ERR
PROFESSIONAL SERVICES	274	362	411	468	530	603	681		13%
CONSULTING	90	119	135	155	177	205	Z33		14%
SOFTWARE DEVELOPMENT	122	162	184	209	234	264	295		13%
EDUCATION/TRAINING	62	81	92	104	119	134	153		14%
SYSTEMS OPERATIONS	55	70	71	83	97	113	133		14%
PLATFORM	29	34	35	39	44	49	55		10%
APPLICATIONS	14	19	18	21	24	28	32		11%
NETWORK	7	8	9	11	12	15	18		18%
DESICTOP	5	9	9	12	17	21	28		25%
SYSTEMS INTEGRATION	280	345	354	397	446	500	560		10%
SOFTWARE DEVELOPMENT	157	193	198	223	250	280	314		10%
DESIGN/INTEGRATION	40	49	51	57	64	72	81		11%
PROJECT MGMT/CONSULTING	57	71	72	81	91	102	114		10%
EDUCATION/TRAINING	16	20	20	22	25	28	31		9%
OPERATIONS/WAINTENANCE	10	12	13	14	16	18	20		11%
TOTAL	614	786	845	960	1090	1237	1402		12%



TABLE A

INPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

SEGMENTATION	1992	1993	1994	1995	1996	1997	1998	1999	CAGR
SEGMENTATION	(SH)	(SN)	(SN)	(98)	(54)	(SH)	(30()	(\$91)	93-98
TELECOHMUNICATIONS									ERR
PROFESSIONAL SERVICES	1200	1341	1565	1831	2132	2485	2899		17%
COMBULTING	252	297	350	415	491	580	689		18%
SOFTWARE DEVELOPMENT	788	845	980	1136	1305	1500	1725		15%
EDUCATION/TRAINING	160	199	235	260	336	405	485		20%
SYSTEMS OPERATIONS	182	82	235	285	333	391	660		41%
PLATFORM	68	24	78	99	109	120	134		41%
APPLICATIONS	73	38	97	111	128	152	176		36%
NETWORK	23	10	29	33	39	46	53		40%
DESKTOP	18	10	/ 31	42	57	73	97		58%
SYSTEMS INTEGRATION	149-	192	212	256	311	377	455		19%
SOFTWARE DEVELOPMENT	81	107	118	143	173	210	254		19%
DESIGN/INTEGRATION	23	30	34	41	50	61	74		20%
PROJECT NGNT/CONSULTING	28	37	41	50	60	73	88		192
EDUCATION/TRAINING	6	8	9	10	13	15	18		18%
OPERATIONS/MAINTENANCE	7	10	10	12	15	18	21		16%
TOTAL	1545	1625	2043	2414	2833	3326	3911		19%
									ERR
RETAIL DISTRIBUTION									ERR
PROFESSIONAL SERVICES	238	257	275	295	316	340	365		7%
CONSULT ING	57	66	69	76	84	92	101		9%
SOFTWARE DEVELOPMENT	146	153	165	176	186	199	212		7%
EDUCATION/TRAINING	35	38	41	43	46	49	52		6%
SYSTEMS OPERATIONS	349	432	533	649	794	962	1182		22%
PLATFORM	166	195	211	242	279	323	376		16%
APPLICATIONS	127	133	197	244	303	370	458		28%
NETWORK	42	44	65	81	101	127	159		29%
DESKTOP	34	60	60	82	111	142	189		26%
SYSTEMS INTEGRATION	170	126	250	298	364	441	534		33%
SOFTWARE DEVELOPMENT	87	65	128	152	186	225	272		33%
DESIGN/INTEGRATION	34	25	50	59	72	87	105		33%
PROJECT NEWT/CONSULTING	33	24	48	57	70	85	103		34X
EDUCATION/TRAINING	8	6	12	15	18	22	27		35%
OPERATIONS/MAINTENANCE	8	6	12	15	18	22	27		35%
TOTAL	791	875					2270		



TABLE A

INPUT FORECAST WITH INFLATION
BY INDUSTRY MODE 5/94

	1992	1993	1994	1995	1996	1997	1998	1999	CAGR
SEGMENTATION	(\$H)	(SH)	(3H)	(\$N)	(\$8)	(NZ)	(SN)	(SH)	93-98
WHOLESALE DISTRIBUTION	-,								ERR
PROFESSIONAL SERVICES	378	410	434	466	500	538	578		7%
CONSULTING	85	90	99	109	120	132	145		10%
SOFTWARE DEVELOPMENT	237	260	272	291	310	332	355		6X
EDUCATION/TRAINING	56	60	63	66	70	74	78		5%
SYSTEMS OPERATIONS	229	247	308	359	423	502	594		19%
PLATFORM	118	110	151	165	191	218	246		17%
APPLICATIONS	58	78	75	86	98	116	134		11%
METWORK	29	25	41	49	59	71	85		28%
DESICTOP	24	34	41	56	75	97	129		31%
SYSTEMS INTEGRATION	102	122	134	159	184	215	250		15%
SOFTWARE DEVELOPMENT	55	67	74	86	100	116	135		15%
DESIGN/INTEGRATION	19	23	25	29	34	39	45		14%
PROJECT MGMT/CONSULTING	18	22	23	38	34	40	46		15%
EDUCATION/TRAINING	5	5	6	7	8	10	12		19%
DPERATIONS/NAINTENANCE	5	5	6	7	8	10	12		19%
TOTAL	733	813	917	1040	1182	1352	1551		14%
									ERR
SANKING AND FINANCE									ERR
PROFESSIONAL SERVICES	2379	2588	2858	3125	3363	3616	3900		9%
CONSULTING	585	688	-688-	B10	890	978	1075		9%
SOFTWARE DEVELOPMENT	1468	1525	1760	1870	1990	2115	2255		8%
EDUCATION/TRAINING	326	375	410	445	483	523	570		9%
SYSTEMS OPERATIONS	2458	2838	3455	4160	4990	5989	7226		21%
PLATFORM	854	722	1129	1298	1493	1732	1996		23%
APPLICATIONS	1042	1446	1414	1669	1952	2323	2735		14%
HETHORK	310	318	473	591	733	894	1709		28%
DESKTOP	252	352	439	602	812	1040	1386		32%
SYSTEMS INTEGRATION	265	335	366	433	532	681	832		202
SOFTWARE DEVELOPMENT	131	167	181	215	264	338	413		20%
DESIGN/INTEGRATION	53	67	73	86	106	136	166		20%
PROJECT MGHT/CONSULTING	53	67	72	86	106	135	165		20%
EDUCATION/TRAINING	14	17	20	23	28	36	44		21%
OPERATIONS/NAINTENANCE	14	17	20	23	28	36	44		21%
TOTAL	5354	6113	7118	8320	9697	11326	13344		17%



TABLE A IMPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

1992	1993	1994	1995	1996	1997	1998	1999	CAGR	
(94)	(84)	(SH)	(\$81)	(SH)	(SN)	(\$8)	(\$11)	93-98	
								ERR	
1569	1668	1833	1980	2093	2245	2417		8%	
384	420	480	536	582	642	712		11%	
970	1006	1078	1143	1173	1239	1301		5%	
215	242	275	301	338	364	404		11%	
1224	1427	1662	1948	2297	2709	3209		18X	
458	574	564	615	676	764	848		8%	
490	522	671	785	926	1093	1284		20%	
153	152	221	266	314	364	431		23%	
123	179	206	282	381	488	646		29%	
157	179	213	258	309	371	446		20%	
82	95	111	135	162	194	233		20%	
31	34	41	49	59	71	85		20%	
26	30	37	44	52	63	76		20%	
9	10	12	15	18	22	27		22%	
9	10	12	15	18	21	25		20%	
3073	3453	3914	4468	5080	5813	6718		14%	
								ERR	
								ERR	
291	319	347	381	413	449	490		97	
70	78	86	96	107	116	130		11%	
181	196	210	230	245	265	288		8%	
40	45	51	55	61	66	72		10%	
1128	1258	1520	1775	2111	2523	3002		19%	
448	497	557	618	686	769	856		11%	
425	462	571	657	788	954	1126		20%	
139	142	186	217	256	312	369		21%	
116	157	206	283	381	488	651		33%	
139	175	172	190	212	236	260		8%	
77	96	95	105	117	130	144		8%	
22	28	27	30	34	38	42		8%	
24	31	30	33	37	42	46		8%	
8	10	10	11	12	13	14		7%	
8	10	10	11	12	13	14		7%	
1674	1909	2245	2629	3117	3696	4403		18%	
	(\$4) 1569 384 970 215 1224 488 490 153 157 82 157 82 157 82 157 126 9 9 9 3073 291 1128 448 448 448 448 459 1128 11	(SM) (SM) 1569 1668 384 420 970 1006 215 242 1224 1427 458 574 490 522 123 179 157 179 52 95 31 34 26 30 9 10 3073 3453 291 319 70 78 181 196 40 45 1128 1258 426 42 116 157 179 96 22 28 8 10 8 10	(SM) (SM) (SM) 1569 1666 1833 384 420 480 970 1006 1072 215 242 275 1224 1427 1662 688 574 564 690 522 671 153 152 221 123 179 206 157 170 213 31 34 41 26 30 37 9 10 12 3073 3453 3914 291 319 347 70 78 86 181 196 210 40 45 51 1128 1258 1520 116 157 266 139 177 267 148 1258 1520 116 157 266 139 177 177 277 178 66 139 177 177 179 69 95 22 28 27 24 31 30 8 10 10	(\$\text{SH}\$) (\$	(SM) (SM) (SM) (SM) (SM) 1569 1666 1833 1780 2093 384 420 480 536 582 970 1006 1078 1143 1173 215 242 275 301 338 1224 1427 1662 1948 2297 468 574 564 615 676 690 522 671 785 926 153 152 221 226 314 123 179 206 282 381 157 179 213 258 309 82 93 111 153 162 31 34 41 49 52 9 10 12 15 18 3073 3453 3914 4468 5080 291 319 347 381 413 70 78 86 96 107 181 196 210 230 245 107 178 196 210 230 245 107 178 179 179 179 111 196 210 230 245 111 196 210 230 245 111 196 210 230 345 111 196 210 230 345 111 196 210 230 345 114 196 210 230 345 115 175 177 511 116 157 206 283 381 1175 177 177 199 217 22 28 27 30 38 10 10 11 11 22 28 13 30 33 37 8 10 10 11 11 2	(SH) (SH) (SH) (SH) (SH) (SH) (SH) (SH)	(\$\text{SH}\$) (\$	(SH) (SH) (SH) (SH) (SH) (SH) (SH) (SH)	CSH) (SH) (SH) (SH) (SH) (SH) (SH) (SH) 93-98



TABLE A

IMPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

	1992	1993	1994	1995	1996	1997	1998	1999	CAGR	
SEGMENTATION	(99)	(98)	(\$11)	(SH)	(\$4)	(94)	(\$81)	(\$1)	93-98	
EDUCATION									ERR	
PROFESSIONAL SERVICES	90	96	110	121	135	168	162		11%	
CONSULTING	23	26	30	33	39	43	48		13%	
SOFTHARE DEVELOPMENT	54	57	63	69	75	82	89		9%	
EDUCATION/TRAINING	13	15	17	19	21	23	25		112	
SYSTEMS OPERATIONS	244	281	323	377	444	532	628		17%	
PLATFORM	50	205	00	66	74	83	92		-15%	
APPLICATIONS	160	76	187	217	252	302	353		36%	
METWORK	30	0,	36	6.0	45	54	61		FRR	
DESKTOP	26	0.4	40	54	73	93	122		FRR	
SYSTEMS INTEGRATION	59	68	79	92	113	131	155		18%	
SOFTWARE DEVELOPMENT	33	37	43	51	62	72	85		18%	
DESIGN/INTEGRATION	10	12	14	16	20	23	27		18%	
PROJECT MGMT/CONSULTING	11	12	14	16	20	23	27		18%	
EDUCATION/TRAINING	2	3	3	4	4	5	6		15%	
OPERATIONS/MAINTENANCE	3	4	5	5	7	8	10		20%	
TOTAL	417	447	552	644	765	904	1067		19%	
									ERR	
BUSINESS SERVICES									ERR	
PROFESSIONAL SERVICES	326	352	376	408	441	477	517		8%	
CONSULTING	85	96	106	119	133	149	167		12%	
SOFTWARE DEVELOPMENT	195	207	218	232	246	260	276		6%	
EDUCATION/TRAINING	46	49	52	57	62	68	74		9%	
SYSTEMS OPERATIONS	181	221	262	319	380	454	548		20%	
PLATFORM	51	58	65	74	83	95	107		13%	
APPLICATIONS	89	111	133	162	191	225	270		19%	
NETWORK	22	26	31	38	46	57	69		22%	
DESKTOP	19	26	33	45	60	77	102		31%	
SYSTEMS INTEGRATION	88	134	141	163	202	250	309		182	
SOFTWARE DEVELOPMENT	40	61	65	75	92	114	141		18%	
DESIGN/INTEGRATION	19	29	30	35	43	54	67		18%	
PROJECT NGHT/CONSULTING	19	29	30	35	43	54	67		18%	
EDUCATION/TRAINING	5	8	8	9	12	16	17		16%	
OPERATIONS/MAINTENANCE	5	7	8	9	12	14	17		19%	
TOTAL.	614	733	812	935	1083	1258	1476		15%	



TABLE A

INPUT FORECAST WITH INFLATION BY INDUSTRY HODE 5/94

SEGMENTATION FEDERAL GOVERNMENT	1992 (\$N)	1993	1994	1995	1996	1997	1998	1999	CAGR	
	(SH)	CRITA								
FEDERAL GOVERNMENT		,,	(SII)	(SH)	(\$4)	(\$14)	(SH)	(\$8()	93-98	
	_								ERR	
PROFESSIONAL SERVICES	2128	2600	2212	2355	2509	2681	2847		2%	
CONSULTING	420-	517	437	464	494	528	560		2%	
SOFTHARE DEVELOPMENT	1364	1628	1433	1574	1701	1842	1975		4%	
EDUCATION/TRAINING	3/4	455	342	317	314	311	312		-7%	
SYSTEMS OPERATIONS	1989	1483	7523	2956	3345	3675	4162		23%	
PLATFORM	619	445	763	839	923	1016	1120		20%	
APPLICATIONS	945	712	1206	1484	1692	1823	2084		24%	
NETWORK	237	148	298	336	380	430	485		27%	
DESICTOP	188	178	256	297	350	406	473		22%	
SYSTEMS INTEGRATION	1538	1296	1921	2150	2399	2683	3000		18%	
SOFTWARE DEVELOPMENT	826	696	1032	1155	1289	1441	1611		18%	
DESIGN/INTEGRATION	237	200	296	332	370	414	463		18%	
PROJECT MGMT/CONSULTING	347	292	433	485	541	605	676		18%	
EDUCATION/TRAINING	78	66	97	108	121	135	151		18%	
OPERATIONS/NAINTENANCE	50	42	63	70	78	88	99		19%	
TOTAL	5843	5557	6912	7758	8603	9445	10482		14%	
									ERR	
STATE & LOCAL GOVERNMENT									ERR	
PROFESSIONAL SERVICES	2840	3026	3427	3825	4271	4770	5328		12%	
CONSULTING	710	776	885	1009	1150	1311	1495		14%	
SOFTWARE DEVELOPMENT	1728	1830	2063	2289	2541	2821	3131		11%	
EDUCATION/TRAINING	402	420	479	527	580	638	702		11%	
SYSTEMS OPERATIONS	1752	1998	2398	2840	3369	4078	4881		20%	
PLATFORM	407	458	511	567	629	698	776		11%	
APPLICATIONS	953	1055	1272	1475	1711	2088	2453		18%	
METWORK	217	260	323	398	489	601	738		23%	
DESKTOP	175	225	292	600	540	691	914		32%	
SYSTEMS INTEGRATION	484	556	708	856	1037	1253	1516		55%	
SOFTWARE DEVELOPMENT	260	298	380	460	557	673	814		22%	
DESIGN/INTEGRATION	75	86	109	132	160	193	234		22%	
PROJECT MGMT/CONSULTING	109	125	160	193	234	283	342		22%	
EDUCATION/TRAINING	24	29	36	43	52	63	76		21%	
OPERATIONS/MAINTENANCE	16	18	23	28	34	41	50		232	
TOTAL	5251	5805	6825	7921	9217	10792	12639		17X	



TABLE A

INPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

	1992	1993	1994	1995	1996	1997	1998	1999	CAGR
SEGMENTATION	(98)	(\$4)	(SH)	(91)	(SH)	(\$4)	(SH)	(SH)	93-98
MISCELLANEOUS INDUSTRIES									ERR
PROFESSIONAL SERVICES	132	142	157	170	185	200	220		9%
CONSULTING	32	35	40	44	49	54	61		12%
SOFTWARE DEVELOPMENT	80	86	94	101	109	117	127		8%
EDUCATION/TRAINING	20	21	23	25	27	29	32		9%
SYSTEMS OPERATIONS	20	23	26	30	35	40	46		15%
PLATFORM	8	8	10	11	12	13	14		12X
APPLICATIONS	12	10	16	19	23	27	32		26%
NETHORK		2	1						ERR
DESKTOP	- (3							ERR
SYSTEMS INTEGRATION	3	6	4	6	7	8	9		182
SOFTWARE DEVELOPMENT	1.5	2	2	3	4	5	6		25%
DESIGN/INTEGRATION	0.6	1	1	1	1	1	1		02
PROJECT MGMT/CONSULTING	0.9	1	1	2	2	2	2		15%
EDUCATION/TRAINING	ŵ								ERR
OPERATIONS/NAINTENANCE	*			*			ŵ		ERR
TOTAL.	155	172	187	206	227	248	275		10%



TABLE A

IMPUT FORECAST WITH INFLATION BY INDUSTRY MODE 5/94

1992	1993	1994	1995	1996	1997	1998	1999	CAGR	
(H2)	(\$80)	(NZ)	(541)	(\$8)	(\$H)	(3H)	(\$N)	93-98	
19287	21364	22905	25207	27649	30414	33542		9%	
4649	5303	5738	6515	7325	8248	9297		12%	
11800	12833	13764	15013	16300	17778	19429		9%	
2838	3228	3403	3679	4024	4388	4816		8%	
11705	12052	15993	18924	22435	26539	31576		21%	
3892	3942	4945	5488	6213	7009	7883		15%	
5203	-5341	7034	8338	9772	11518	13546		20%	
1438	1320	2045	2456	2945	3545	4268		26%	
1172	1449	1969	2642	3505	4467	5879		32%	
2904	3077	4071	4826	5824	6995	8380		22%	
1553	1644	2174	2580	3106	3729	4467		22%	
506	530	711	843	1021	1229	1475		23%	
565	605	793	941	1136	1367	1636		22%	
146	158	204	240	290	347	415		21%	
135	140	189	222	271	323	387		23%	
1538	1296	1921	2150	2399	2683	3000		18%	
826	696	1032	1155	1289	1441	1611		18%	
237	200	296	332	370	414	463		18%	
347	292	433	485	541	605	676		18%	
78	66	97	108	121	135	151		18%	
50	42	63	70	78	88	99		19%	
35434	37789	44890	51107	58307	66631	76498		15%	
	19287 4649 11800 2538 11705 5203 1438 11705 506 565 1446 237 347 77 77 75 50	(84) (84) (84) (84) (84) (84) (84) (84)	(\$M) (\$M) (\$M) 19287 21364 22905 4649 3303 5738 11800 12833 13764 28285 3228 3403 11708 12052 15993 3092 3092 40945 2013 5344 7034 1438 1320 2094 1377 4071 1553 1644 2174 506 530 711 565 603 792 1468 158 204 135 140 158 2	(244) (244) (244) (244) 19287 21364 22905 25207 4669 5303 5753 6515 11800 12853 13764 19013 22858 5228 5402 5479 11705 12052 15995 18924 5307 3942 4945 5488 5203 5203 1909 2645 1473 1320 2045 2456 1172 1429 1909 2645 2504 5077 4071 4872 1553 1640 1909 222 1553 1640 190 222 1553 1640 190 222 1553 1540 1902 1245 1553 1540 1902 1245 1553 1540 1902 1245 1553 1560 1902 1245 1553 1560 1902 1245 1553 1260 1902 1255 1553 1260 190	(SH) (SH) (SH) (SH) (SH) 19287 21364 22908 23207 27649 4649 5303 5738 6515 7325 11800 12833 13764 15913 16300 12833 13764 15913 16300 12833 13764 15913 16300 12932 15993 16924 224.55 23073 3942 4945 3458 6213 2503 -5344 7034 8359 6772 1438 1320 2045 2556 2045 11705 15909 2462 2556 2004 3077 4071 4625 9324 1593 1646 2174 2590 3246 1506 530 771 843 1021 1505 1640 199 222 271 1353 1640 199 222 271 1353 1296 1921 2590 2399 266 696 1032 1155 1289 257 200 296 333 485 541 78 66 97 108 121 78 66 97 108 121 78 66 97 108 121 78 66 97 108 121 78 66 97 108 121 78 66 67 70 108 121	(244) (244)	(SM) (SM) (SM) (SM) (SM) (SM) (SM) (SM)	(244) (244)	(SM) (SM) (SM) (SM) (SM) (SM) (SM) (SM)



Discrete Manufacturing Sector

U.S. Market Forecast by Delivery Mode, 1993-1998

		Growth							CAGF
	1992	92-93	1993	1994	1995	1996	1997	1998	93-98
Delivery Modes	(SM)	(%)	(\$M)	(\$M)	(\$M)	(\$M)	(SM)	(SM)	(%)
Total Sector	13,092	12	14,632	16,450	18,594	21,152	24,211	27,950	14
Information Services Mkt.									
Professional Services	4,822	7	5,178	5,571	5,983	6,434	6,929	7,508	8
- IS Consulting	1,192	12	1,333	1,493	1,687	1,906	2,154	2,434	13
- Education & Training	750	10	825	908	998	1,098	1,208	1,329	10
- Custom Software	2,880	5	3,020	3,171	3,298	3,430	3,567	3,745	4
Systems Integration	1,364	19	1,620	1,934	2,321	2,785	3,325	3,972	20
- Equipment	800	19	952	1,142	1,382	1,673	2,007	2,409	20
- Software Products	99	16	115	134	157	183	213	249	17
- Professional Services	420	19	500	595	708	843	1,003	1,193	19
- Other	45	18	53	63	74	87	103	121	18
Systems Operations	705	20	846	1,017	1,226	1,479	1,789	2,168	21
- Platform Operations	260	16	301	349	405	470	545	632	16
- Application Operations	280	19	333	396	472	561	668	795	19
- Desktop Services	90	26	113	141	177	221	276	345	25
- Network Management	75	32	99	131	172	228	301	397	32
Processing Services	870	3	896	923	951	979	1,009	1,039	3
- Transaction Processing	870	3	896	923	951	979	1,009	1,039	3
Network Services	106	21	128	155	188	227	275	334	21
- Electronic Info Services	52	19	62	74	88	104	124	148	19
 Network Applications 	54	22	66	81	100	123	151	186	23
Application SW Products	2,285	18	2,695	3,209	3,864	4,703	5,789	7,201	22
- Mainframe	390	5	410	431	452	475	498	523	5
- Minicomputer	1,145	11	1,275	1,415	1,571	1,744	1,936	2,148	11
- Workstation/PC	750	35	1,010	1,364	1,841	2,485	3,355	4,529	35
Tumkey Systems	2,940	11	3,269	3,640	4,062	4,544	5,096	5,728	12
- Equipment	1,300	6	1,380	1,463	1,551	1,644	1,742	1,847	6
- Software Products	1,140	13	1,289	1,457	1,647	1,864	2,109	2,388	13
- Professional Services	500	20	600	720	864	1,037	1,244	1,493	20

1993 FORTERST COMPEROINING



EXHIBIT A-1

Discrete Manufacturing Sector Market Size by Delivery Mode, 1992-1998

Delivery Modes	1992 (\$M)	Growth 92-93 (%)	1993 (\$M)	1994 (\$M)	1995 (\$M)	1996 (\$M)	1997 (\$M)	1998 (\$M)	CAGR 93-98 (%)
Sector Total	13,085	12	14,632	16,450	18,594	21,152	24,211	27,950	14
Processing Services - Transaction Processing	870	3	896	923	951	979	1,009	1,039	3
	870	3	896	923	951	979	1,009	1,039	3
Tumkey Systems - Equipment - Software Products - Applications Software - Systems Software - Professional Services	2,940	11	3,269	3,640	4,062	4,544	5,096	5,728	12
	1,300	6	1,380	1,463	1,551	1,644	1,742	1,847	6
	1,140	13	1,289	1,457	1,647	1,864	2,109	2388	13
	990	14	1,130	1,288	1,469	1,674	1,909	2,176	14
	150	6	159	169	179	189	201	213	6
	500	20	600	720	864	1,037	1,244	1,493	20
Applications Software - Mainframe - Minicomputer - Workstation/PC	2,285	18	2,695	3,209	3,864	4,703	5,789	7,201	22
	390	5	410	431	452	475	498	523	5
	1,145	11	1,275	1,415	1,571	1,744	1,936	2,148	11
	750	35	1,010	1,364	1,841	2,485	3,355	4,529	35
Systems Operations - Platform Operations - Applications Operations - Desktop Services - Network Management	705	20	846	1,017	1,226	1,479	17,89	2,168	21
	260	16	301	349	405	470	545	632	16
	280	19	333	396	472	561	668	795	19
	90	26	113	141	177	221	276	345	25
	75	32	99	131	172	228	301	397	32
Systems Integration - Equipment - Software Products - Applications Software - Systems Software - Professional Services - Other	1,364	19	1,620	1,934	2,321	2,785	3,325	3,972	20
	800	19	952	1,142	1,382	1,673	2,007	2,409	20
	99	16	115	134	157	183	213	249	17
	65	14	74	84	97	111	126	144	14
	34	21	41	50	60	72	86	105	21
	420	19	500	595	708	843	1,003	1193	19
	45	18	53	63	74	87	103	121	18
Professional Services - IS Consulting - Education & Training - Custom Software	4,815	8	5,178	5,571	5,983	6,434	6,929	7,508	8
	1,190	12	1,333	1,493	1,687	1,906	2,154	2,434	13
	750	10	825	908	998	1,098	1,208	1,329	10
	2,875	5	3,020	3,171	3,298	3,430	3,567	3,745	4
Network Services - Electronic Information Svcs.	106	21	128	155	188	227	275	334	21
	52	19	62	74	88	104	124	148	19
- Network Applications	54	22	66	81	100	123	151	186	23

1993 INDUTTRY REPORT



AVDM.XLS		DISCRE	TE MAN	UFACTI	JRING				
NVDIM.ALS		D.00.1	Expenditu						
								-	
Copyright 1994 by INPU	Г	by Del	ivery Mod		1999				
21-Mar-94			(\$ Milli	ons)					
		Growth	-						CAGE
DELIVERY MODES	1993	93-94	1994	1995	1996	1997	1998	1999	94-99
	(\$)	(%)	(\$)	(\$)	(\$)	(\$)	(\$)	(\$)	(%)
				13%	14%	15%	15%	16%	
SECTOR TOTAL	14687	13%	16528	18639	21176	24267	28024	32597	15%
				7%	7%	-7X	7%	TZ.	
Professional Services	5194	7%	5580	5961	6377	6831	7327	7869	7%
IS Consulting	1342	13%	1510	1687	1884	2104	2350	2625	12%
Education & Training	827	10%	906	1000	1104	1219	1346	1486	10%
Software Development	3025	5%	3164	3274	3389	3508	3631	3758	4%
Application Manageme	nt								
				19%	20%	214	21%	21%	
Systems Integration	1631	19%	1948	2325	2800	3396	4124	4977	21%
Equipment	957	20%	1149	1370	1655	2028	2485	3017	21%
Software Products	116		135	158	187	219	258	303	18%
Professional Services	505	19%	601	723	870	1046	1259	1515	20%
Other	53	19%	63	74	88	103	122	142	18%
				21%	21%	21%	21%	21%	21%
Systems Operations	851		1027	1239	1493	1810	2190	2660	16%
Platform Operations	299		348	404	470	549	631	732	19%
 Applications Operation 			403	478	565	670	795	942	25%
Desktop Services	115		145	183	228	286	360	451 535	33%
Network Management	99	32%	131	174	230	305	404	3%	33%
				3%.	3X	3%	3% 1039	1069	3%
Processing Services	894		925	952	980	1009	1039	1069	3%
 Transaction Processin 	g 894	3%	925	952	980	1009	1039	1009	34
- Utility Processing									
- Other Processing							22%	21%	
				21%.	21%	21%	338	410	21%
Network Services	129		156	189	229	278	146	173	19%
 Electronic Information 			74	88	104	155	192	237	242
 Network Applications 	67	22%	82	101	125	23%	25%	26%	241
				21%	4760	5873	7325	9235	233
Applications Software	2706		3237	3905	4760	497	523	550	5%
- Mainframe	405		427	450	1756	1946	2155	2390	112
- Minicomputer	1284		1430	1585 1870	2532	3430	4647	6295	352
- Workstation/PC	1017	36%	1380	11%	12%	12%	12%	12X	
					4537	5070	5681	6377	122
Turnkey Systems	3282		3655	4068 1552	1643	1740	1843	1952	6%
- Equipment - Software Products	1378		1465	1642	1848	2078	2338	2630	123

1994 INDUSTRY REPORT

